

THE TREATMENT OF HIGHWAY INJURY
An International Bibliography

ERIC G. HANITZSCH

The University of Michigan

Highway Safety Research Institute

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PREFACE

The effectiveness of an emergency medical system must depend upon both the timeliness of response within the system, and the adequacy of professional care offered by the system. The relationship between these two factors is a function of many things, such as the environment, the type and severity of injury, and the condition of the victim prior to injury.

The Highway Safety Research Institute has developed a mathematical model of a recovery system relating these various factors. The present bibliography was prepared in order to provide real data to this model. Literature was sought which reported on multiple cases of trauma from either the field treatment (ambulance) or hospital point of view. In addition, numerous summary reports of autopsy findings in cases of traumatic injury were received. Sources for this literature are world-wide. Although many indexes were used, we should mention particularly *Index Medicus*. The cut-off date for materials in this bibliography was December 1968.

Erik Hanitzsch, who prepared this work, was trained as an engineer. His interest in emergency medical care came primarily from the point of view of a system designer. During his tenure at this institute he was concerned with a series of programs involving the study and design of ambulance operations. It is our hope that his collection of reports from over 500 sources, in several languages, carefully read and annotated by a single individual, will provide a ready reference to the world's literature in the field. We expect that it will prove useful to physicians and other professionals concerned with emergency services, to researchers in trauma, and to library personnel who provide support to these people.

James O'Day
Head, Systems Analysis-Information Center
Highway Safety Research Institute
The University of Michigan

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SUBJECT INDEX 131

USER'S GUIDE

This Bibliography of emergency medical care contains approximately 650 annotated references, grouped according to subject into four major categories and 18 subclasses. Within each category, the references are arranged by accession number. References that fall into more than one category are cross-referenced.

English annotations were prepared by the HSRI Systems Analysis Group from the original documents in English, French, German, Spanish, and Italian, and from translations of documents in the Japanese, Romanian, and Scandinavian languages. In case of difficulty locating any of the references, the complete file of originals is available at HSRIC.

English translations of some of the foreign language documents were obtained from the Scientific Translation Service (S.T.S.). For these references an S.T.S. number appears with the bibliographic information of the reference.

There are three indexes to the Bibliography: (1) a personal author index; (2) a permuted title index; and (3) a detailed subject index based on a structured thesaurus of subject descriptors.

1. The personal author index references all authors by surname and initials (p. 103).
2. In the permuted title or KWIC (Key-Word-In-Context) index, significant words from the title are displayed alphabetically (p. 111).
3. The subject index uses the simple coding scheme that precedes the index itself (p. 131). Specific topics are listed under the more general ones. The contents of each document are described by as many descriptors as are needed.*

The indexes are linked to the bibliography annotations by the reference numbers assigned to each document. Each number is made up of a 2-digit prefix

indicating the subject category and a 4-digit accession number, followed by the suffix S or N, where S indicates significant statistics or data content, and N indicates the reference is not statistical in content. Thus, the sample reference number 01-3726 S gives the following information:

01=	3726=	S=
Subject	Accession	Contains significant
Category	Number	statistics/data

Reference number:
where to find
the annotation

Citations in the Bibliography include the subject descriptors used for each document to permit the user to locate other items on the same subject through the subject index.

Any comments on or additions to this Bibliography may be referred to:

Joseph C. Marsh IV
Head, Highway Safety Research
Information Center
Huron Parkway and Baxter Road
Ann Arbor, Michigan 48105

*Subjects can be combined (or coordinated) to find more specific references. For instance, areas of the body (OA) are separate from kinds of injuries (JN) but used in combination to describe a particular injury. Thus a leg fracture is indexed and retrieved by OADE (body area, leg) and JNH (kind of injury, fracture).

BIBLIOGRAPHY

BIBLIOGRAPHY

01-2592 S

Jamieson, K. G./ Tait, I. A.
TRAFFIC INJURY IN BRISBANE. Report of a general survey. National Health and Medical Research Council special report series no. 13.
Royal Brisbane Hospital, Dept. of Neurology and Neurosurgery, Queensland (Australia)/ National Health and Medical Research Council. 1966. 353 p. figs. tables.
Sponsor: Queensland Govt. Dept. of Health/ Margaret Hart Martin Bequest for Brain/ Univ. of Queensland, Cancer Research.

DEC Passenger Cars, Passenger Motor Vehicles, Vehicle
EN Passengers, People
EO Driver
JKB Ejection, Accident Hazards, Accident
JLR Accident Records, Accident Investigation, Accident
JN Injury
KN Brisbane, Australia, Space
NLE Impact, Phenomena, Physical Aspect
YCD Survey, Nature of Study, Study-Report Type
YEG Tables/Graphs, Contents

During a 16-month period in 1962-63, 1000 consecutive hospital admissions (including 188 deaths) resulting from traffic injuries were investigated. Full details of the injuries were obtained by a medical research fellow, and every death was studied by detailed autopsy.

Age, driver-passenger involvement, type of accident, and type of vehicle are tabulated. Type and classification of injuries and mortality and its relationship to the complexity of injuries are discussed. Ejection, use of safety belts, and types of vehicles are correlated with injury patterns, position of victim in car, and mortality. Distance from accident site to the Hospital, and the time from accident to death, were analyzed as a function of mortality trends and causes of death. Hemorrhage and asphyxia account for one-third of all fatalities.

01-3726 S

Ryan, G. A.
INJURIES IN TRAFFIC ACCIDENTS.
Guggenheim Center for Aerospace Health and Safety/ Harvard School of Public Health, Div. of Engineering and Health Services. 11 May 1967. 11 p. figs. tables.
New England Journal of Medicine, Vol. 276, No. 19, 11 May 1967, pp. 1066-1076.

J Accident
DE Motor Vehicles, Vehicle
YEF Data Statistics, Contents, Study-Report Type
WMEBD Regression, Design, Statistical/Probability, Mathematical, Methods
OAI Head, Anatomy/Body, Biomedical Aspect
OAH Neck
OAE Abdomen
OAOBB Vertebrae, Bones, Musculo-Skeletal System
OAD Lower Extremity
OADH Pelvis
OAG Upper Extremity
YEG Table/Graphs, Contents, Study-Report Type

Discusses Adelaide, Australia study in 1963 and 1964. Investigated 408 accidents involving 1,315 persons. Classification of injury severity is modification of ACIR classification. Gives frequency of injuries by body area,

and age distributions. Discusses mechanisms of injury to pedestrians. Analysis of impact point on motorcycle helmets indicates that Australian Standards are not adequate. Frequency of side impacts to cars comparable to front impacts. Tabulates distribution, degree of injury, and cause of injury in car accidents. Emphasis of study is on vehicle design.

01-3749 S

Bauer, K. H.
ÜBER VERKEHRUNFÄLLE AUS DER SICHT DES CHIRURGEN. [TRAFFIC ACCIDENTS AS VIEWED BY THE SURGEON.]
1954. 14 p. figs. ref. charts. tables.
Langenbecks Archiv fuer Klinische Chirurgie, Vol. 279, 1954, pp. 141-166.

WSD Surgery, Medical, Methods
DE Motor Vehicles, Vehicle
J Accident
YEF Data Statistics, Contents, Study-Report Type
VN Epidemiology, Disciplines
SC Economics, Socioeconomic Aspect
VMB Biomechanics, Biomedical Sciences

Discusses national (Germany) statistics of trauma and analyzes about 2,500 trauma patients logged during five years at the Heidelberg Clinic. 7,344 of those required admission to hospital, 27% of whom had suffered traffic accidents.

Etiology of trauma, and time trends are discussed. Mortality rates are cited to prove traffic accidents are more serious than industrial accidents. Mortality rates, as analyzed by the area of the body where injuries are produced, are highest for head injuries.

Tabulates traffic and industrial accidents, frequency of occurrence of injuries by body areas, and number of fatalities by body area injured. Frequencies of multiple injuries are also shown.

Time of death after injury in days is tabulated for motor accidents as compared to industrial accidents. Average duration of absence from work is shown as a function of body area injured.

Severity of deceleration is discussed for various kinds of collision. Speed is pointed out to be the only variable that directly influences the severity of an accident which can be controlled by legislation.

01-3751 S

Gögler, E./ Laqua, H.
DIE BEDEUTUNG DES UNFALLKRANKENGUTES FÜR DIE KLINISCHE CHIRURGIE. [THE SIGNIFICANCE OF TRAUMA RECORDS FOR CLINICAL SURGERY.]
Chirurgischen Universitätsklinik Heidelberg (Germany). 1953. 22 p. charts. figs. tables.
Langenbecks Archiv fuer Klinische Chirurgie, Vol. 275, 1953, pp. 477-518.

JN Injury/Trauma, Accident
WSD Surgery, Medical, Methods
YEF Data Statistics, Contents, Study-Report Type
VN Epidemiology, Disciplines
L Time
EA Age, People
OAI Head, Anatomy/Body, Biomedical Aspect
OAN Nervous System

BIBLIOGRAPHY

OAF Thorax
OAE Abdomen
JNX Multiple Severe Injuries

Authors evaluate records of 6,196 trauma patients in Heidelberg, 1947-1951. Discuss etiology of trauma and emergency-room requirements and show time trends for each accident cause, injury distributions by body area, time lapse from accident to death.

Present diagnosis, therapy, and consequences for fractures and injury to head, spine, thorax, and abdomen.

01-3805 S

Jamieson, K. G.
THE TOLL OF THE ROAD: Clinical aspects.
23 July 1966. 4 p. tables.
Medical Journal of Australia, Vol. II, No. 4, 23 July 1966, pp. 157-160.

VN Epidemiology, Disciplines
YCD Survey, Nature of Study, Study-Report Type
EA Age, People
L Time
YEF Data Statistics, Contents
JNK Hemorrhage, Injury/Trauma, Accident
JNN Asphyxia/Suffocation
OAI Head, Anatomy/Body, Biomedical Aspect
OAF Thorax

16-month Brisbane survey covered 1000 consecutive admissions to hospital or deaths from traffic accidents. Report gives time and place of deaths, distance and time involved in transportation of victims to hospital, time of admission, and general management. Tables show etiology of trauma related to mortality rates, age and sex of surviving and dead drivers and passengers, and distributions of accidents according to day of week and time of day. Complexity of injuries is discussed; place of death and interval between arrival at hospital and death are given.

01-3811 N

Owen, J. K.
OPPORTUNITY FOR COMMUNITY LEADERSHIP: Emergency services must be reorganized.
Public Health Service, Emergency Health Services Branch, Washington, D.C. 1967. 7 p. photos.
Source: McGraw-Hill, Inc. Reprinted from *The Modern Hospital*, Dec. 1966.

YER General Discussions, Contents, Study-Report Type
QGM Medical, Education, Educational Aspect
XT Medical, Equipment

Presents general situation of emergency medical care, citing studies supported by U.S. Public Health Service. Recommends creation of council on emergency medical care in every community. Checklists for evaluating emergency service facilities and organizations are given.

01-3816 N

Burger, J. G.
THE ORGANIZATION OF AN EFFICIENT ACCIDENT SERVICE.
9 Nov. 1963. 4 p. figs. tables.
South African Medical Journal, Vol. 37, 9 Nov. 1963, pp. 1133-1136.

KLC School/Hospital, Zone/Land Usage, Space
JR Recovery of Injured, Accident
WSBCR Resuscitation, Maintaining Airways, First Aid, Medical, Methods
YER General Discussions, Contents, Study-Report Type

Discusses organization, staffing, and equipment to improve hospital casualty departments and suggests layout. Recommends resuscitation-ward and resuscitation-trolley equipment.

01-3818 S

YALE STUDIES IN AMBULATORY MEDICAL CARE. V. Determinants of use of hospital emergency services.
Yale Univ. School of Medicine, Dept. of Epidemiology and Public Health, New Haven, Connecticut/ Yale-New Haven Hospital, Office of Ambulatory Services. July 1966. 11 p. figs. maps. tables. ref.
American Journal of Public Health, Vol. 56, No. 7, July 1966, pp. 1037-1056.
Grant No: 00037-02,03.
Sponsor: Public Health Service, Div. of Community Health Services.

S Socioeconomic Aspect
VN Epidemiology, Disciplines
YCD Survey, Nature of Study, Study-Report Type
EA Age, People
JR Recovery of Injured, Accident
JE Single Vehicle

Methods and findings are reported of study of 2,028 consecutive visits to emergency service of Yale-New Haven Hospital during two weeks in July, 1964. Data were obtained from medical records and from interview-questionnaires given to randomized subsample of 402 patients. Factors found significantly related to urgency rating of patient were: age, regular relationship with personal physician, professional referral, years at current address, minority-group status, and location of residence in city. Urgency ratings were found to be essentially similar for various days of week and hours of day.

01-3821 S

Manheimer, D. I./ Dewey, J./ Mellinger, G. D./ Corsa, L., Jr.
50,000 CHILD-YEARS OF ACCIDENTAL INJURIES.
California State Dept. of Public Health, Family Research Center, Berkeley/ Univ. of Michigan, Center of Population Planning, Ann Arbor. June 1966. 17 p. tables. ref.
Public Health Reports, Vol. 81, No. 6, June 1966, pp. 519-533.
Grant No: AC-00002.
Sponsor: Public Health Service, Div. of Accident Prevention.

EC Children, People
YCD Survey, Nature of Study, Study-Report Type
VN Epidemiology, Disciplines
YEG Tables/Graphs, Contents

Data were analyzed of the accident experience of 8,874 children receiving prepaid medical care in Berkeley and Oakland, including boys and girls four to eighteen years old. Race, socioeconomic status, age, sex, birth order, number of siblings, and mother's predisposition to seek medical aid were compared to type, severity, and frequency of injuries.

BIBLIOGRAPHY

01-3824 S

Waller, J. A./ Garner, R./ Lawrence, R.
UTILIZATION OF AMBULANCE SERVICES IN A RURAL COMMUNITY.
California State Dept. of Public Health, Bureau of Occupational Health, Berkeley/ Johns Hopkins Univ. School of Medicine, Baltimore, Maryland/ California Univ. Medical School, Los Angeles. March 1966. 8 p. map. tables. figs. ref.
American Journal of Public Health, Vol. 56, No. 3, March 1966, pp. 513-520.
Sponsor: National Institutes of Health.

KBK Rural, Terrain/Habitat, Space
JR Recovery of Injured, Accident
VN Epidemiology, Disciplines
YEF Data Statistics, Contents, Study-Report Type
YEG Tables/Graphs
OAK Cardiovascular System, Anatomy/Body, Bio-medical Aspect
OAL Respiratory System

Describes 1963 study of 923 trips made by one California ambulance company. Information about each person was obtained from trip records, admission and Emergency Room records. Distribution of ambulance calls and fatalities by cause is tabulated. Attempt to correlate patient survival with distance carried brought no results except for cardiovascular-respiratory disease. Ambulance subscription systems and "speeding ambulance" are discussed.

01-3834 N

Hampton, O. P., Jr.
PRESENT STATUS OF AMBULANCE SERVICE IN THE UNITED STATES.
July-Aug. 1965. 2 p.
American College of Surgeons. Bulletin, Vol. 50, July-Aug. 1965, pp. 177-179.

FDE Service Organizations, Corporate Bodies, Society
DEHL Ambulance, Special Purpose, Motor Vehicles, Vehicle
YCD Survey, Nature of Study, Study-Report Type

Summarizes findings of survey of 900 cities. Of 204 cities claiming an ordinance regulating ambulance service, only 162 require attendant in addition to driver and only 174 require equipment listed by A.C.S. Committee on Trauma. Recommends that casualty-carrying vehicles not be given special privileges in city traffic.

01-3848 N

Drye, J. C./ Hyde, C. J.
THE LOUISVILLE PLAN FOR CARE OF THE INJURED.
1965. 6 p. figs.
Postgraduate Medicine, Vol. 38, July 1965, pp. 43-48.

JR Recovery of Injured, Accident
WSB First Aid, Medical, Methods
L Time

Discusses Police Department program to provide prompt care for accident victims. High number of D.O.A.'s at hospital in 1964. No first aid is discussed.

01-3851 N

Wade, P. A.
AUTOMOBILE CRASH INJURIES.
Cornell Univ. Medical College, New York. 1966. 11 p. figs.
Louisiana State Medical Society. Journal, Vol. 118, No. 5, May 1966, pp. 167-178.
Conference: New Orleans Graduate Medical Assembly, 28th annual, 9 March 1965, Louisiana.

JN Injury/Trauma, Accident
JRH Transportation, Recovery of Injured, Accident
VN Epidemiology, Disciplines
JRJE Emergency Room, Hospital Care, Recovery of Injured, Accident

Discusses the epidemiology of automobile trauma. Improvements in automobile design, risk of ejection, value of seat belts and interlocking door latches are discussed, as are treatment, emergency medical care, and emergency-room requirements. Author claims that medical schools should include more training in trauma. Cites an analysis of 2,500 cases in 1958 in which researchers found that haste was seldom essential to patient's welfare.

01-3853 N

Owens, J. C.
EMERGENCY MEDICAL SERVICES IN THE SMALL COMMUNITY.
Colorado Univ. School of Medicine, Dept. of Surgery. 1966. 9 p. figs.
Rocky Mountain Medical Journal, Vol. 63, June 1966, pp. 23-31.
Sponsor: American College of Surgeons, Colorado Committee on Trauma/ Colorado Univ. Medical Center/ Medical Education for National Defense.
Conference: Wyoming State Medical Society, 62nd annual, 25 Aug. 1965, Moran.

JRJ Hospital Care, Recovery of Injured, Accident
YCD Survey, Nature of Study, Study-Report Type
WSB First Aid, Medical, Methods
SC Economics, Socioeconomic Aspect

Reports on survey of 44 general medical hospital emergency departments with 75 beds or less in 43 communities of 10,000 population or less. Ambulance services were included in survey. Situation and quality of ambulance services and their contact with hospitals are discussed. Personnel first aid training, ambulance design and equipment, confusing highway and street signs leading to emergency hospitals, and types of emergencies are mentioned. Emergency equipment and emergency-room procedures are evaluated.

01-3857 S

Waller, J. A.
CONTROL OF ACCIDENTS IN RURAL AREAS.
California State Dept. of Public Health, Bureau of Occupational Health, Berkeley. 1967. 5 p. tables. ref.
American Medical Association. Journal, Vol. 201, No. 3, 17 July 1967, pp. 94-98.
Conference: 19th National Conference on Rural Health, 19 March 1966, Colorado Springs.

YCB Research, Nature of Study, Study-Report Type

BIBLIOGRAPHY

KBE Mountains, Terrain/Habitat, Space
 KBK Rural
 KBM Urban/Town/City
 QGM Medical, Education, Educational Aspect
 SFD Community Support, Measures, Socioeconomic

Compares accident fatality rates in urban, agricultural, and mountain counties in California. Fatal rural accidents were no more severe than urban accidents. Motor-vehicle fatalities are over 2½ times as frequent in agricultural counties and 5 times as frequent in mountain counties as in urban counties. Reference is made to another study by the author showing a rural traffic-accident death rate as being four times the urban rate. Over 90% of rural accident deaths within the first hour occurred at accident scene, whereas only one-third of first-hour fatalities in urban areas had not been moved.

01-3862 S

Bradham, G. B.
AN ANALYSIS ON 2,418 EMERGENCY ROOM ADMISSIONS.
 South Carolina Medical College, Medical College Hospital, Charleston. May 1965. 4 p. figs.
South Carolina Medical Association. Journal, Vol. 61, No. 5, May 1965, pp. 127-130.

YCD Survey, Nature of Study, Study-Report Type
 JRJE Emergency Room, Hospital Care, Recovery of Injured, Accident
 YEF Data Statistics, Contents, Study-Report Type

Frequencies of admissions are given by day of month, hour of day, race, and age group.

01-3886 N

Welply, W. R.
PROVINCIAL WIDE AMBULANCE SERVICE FOR MANITOBA.
 1965. 3 p.
Manitoba Medical Review, Vol. 45, Jan. 1965, pp. 16-18.

JR Recovery of Injured, Accident
 DEHL Ambulance, Special Purpose, Motor Vehicles, Vehicle
 X Equipment
 SFD Community Support, Measures, Socioeconomic Aspect
 SC Economics

Follow-up to a brief presentation to the Manitoba Medical Association in 1961 recommending changes in ambulance operations. Ideal ambulance-service facilities are described. Suggestions are made for formation of rural and urban Ambulance Association.

01-3906 N

Skudder, P. A./Wade, P. A.
THE ORGANIZATION OF EMERGENCY MEDICAL FACILITIES AND SERVICES.
 Cornell Univ. Medical College, Dept. of Surgery, New York, New York. May 1964. 15 p. ref.
Journal of Trauma, Vol. 4, May 1964, pp. 358-372.

JRJE Emergency Room, Hospital Care, Recovery of Injured, Accident

IO Hospital
 JNX Multiple Severe Injuries, Injury/Trauma
 X Equipment

Authors indicate the need for new or revised emergency facilities arising from increased use following World War II. Briefly describe areas of professional organization which should be assumed by emergency room committee. Suggest physical plant for emergency department. List factors to be considered in planning new facilities, and equipment, supplies, and pharmaceuticals for emergency department; only brief treatment of equipment for ambulances.

01-3918 S

Waller, J. A./Curran, R./Noyes, F.
TRAFFIC DEATHS: A preliminary study of urban and rural fatalities in California.
 California State Dept. of Public Health, Div. of Accident Prevention/ Cornell Univ. Medical College, New York, New York/ George Washington Univ. Medical School, Washington, D.C. Oct. 1964. 5 p. tables. figs.
California Medicine, Vol. 101, No. 4, Oct. 1964, pp. 272-276.

JNB Fatal, Injury/Trauma, Accident
 KBK Rural, Terrain/Habitat, Space
 KBM Urban/Town/City
 YCD Survey, Nature of Study, Study-Report Type
 YEF Data Statistics, Contents
 L Time

Authors discuss a California death-certificate study of 782 victims enclosed in vehicles in 1961. Tabulations: estimated salvageability by type of accident, urban/rural location, and body areas injured; frequencies for urban or rural accidents by hour and place of residence of victims; proportion of deaths occurring at given intervals after injuries to specific anatomic areas. Indicate more fatalities within one hour of rural than of urban accidents. Distance patient transported before death versus survival times indicates earlier care and transportation for urban victims.

01-3919 N

Corcoran, J.
ACCIDENT AND EMERGENCY SERVICES IN DUBLIN.
 Mater Misericordiae Hospital, Dublin (Ireland). Oct. 1964. 4 p. figs. ref.
Irish Medical Association. Journal, Vol. 55, Oct. 1964, pp. 99-105.

JR Recovery of Injured, Accident
 JN Injury/Trauma
 KLC School/Hospital, Zone/Land Usage, Space
 YCJ Future/Projection, Nature of Study, Study-Report Type
 QD Teaching/Training, Educational Aspect
 JRGI Professional/Physician, Treatment/Care

Describes Dublin ambulance service provided by the Fire Brigade, mentioning ambulance radio communications and resuscitation and suction equipment, and cooperation with the police. Recommendations include separate casualty and emergency services, and a single "Accident and Emergency" center for the whole city. Recommends an advanced first aid course for every

BIBLIOGRAPHY

medical student, and service as hospital orderlies for ambulance men in training.

01-3925 N

Lougheed, J. C.

THE CURRENT STATUS OF EMERGENCY TREATMENT IN AUTOMOBILE ACCIDENTS: With recommendations to professional and civilian personnel.

Methodist Hospital, Dept. of Surgery, Memphis, Tennessee. 1965. 6 p. tables. ref.

Southern Medical Journal, Vol. 58, Sept. 1965, pp. 1083-1088.

JR Recovery of Injured, Accident
JN Injury/Trauma
JRJE Emergency Room, Hospital Care, Recovery of Injured, Accident
YER General Discussions, Contents, Study-Report Type
X Equipment
QD Teaching/Training, Educational Aspect
VN Epidemiology, Disciplines

In a five-year survey, information was compiled about the accident itself, patient's condition and treatment prior to admission, and emergency-room data. Factors discussed include first aid, equipment in ambulances, police cars, and firemen's rescue vehicles, and emergency room organization. Frequent mistakes and complications in emergency room are given. Types of injuries and body areas injured are tabulated.

01-3926 N

Waller, J. A.

AMBULANCE SERVICE TRANSPORTATION OR MEDICAL CARE.

California State Dept. of Public Health, Berkeley. Oct. 1965. 4 p. ref.

Public Health Reports, Vol. 80, No. 10, Oct. 1965, pp. 847-853.

DEHL Ambulance, Special Purpose, Motor Vehicles, Vehicle
JR Recovery of Injured, Accident
QD Teaching/Training, Educational Aspect
X Equipment
YER General Discussions, Contents, Study-Report Type
SC Economics, Socioeconomic Aspect

Describes ownership, organization, and financial condition of ambulance services, pointing out deficiencies in Red Cross training course and making recommendations for improvement in equipment, training, communications, and emergency medical care research.

01-3928 N

Kossuth, L. C.

THE REMOVAL OF INJURED PERSONNEL FROM WRECKED VEHICLES.

Air Force Medical Service School, Gunter AFB, Alabama. 1965. 4 p.

Journal of Trauma, Vol. 5, No. 6, Nov. 1965, pp. 703-708.

JRF Extraction of Occupant, Recovery of Injured, Accident
JNH Fracture

WSBC Maintaining Airways, First Aid, Medical Methods

The USAF Air Training Command's Medical Service School trains men in first aid with special emphasis on techniques for removal of victims from vehicles. Management of fractured femur and lower leg and foot injury is discussed. Good procedure for management of back injuries is still being developed.

01-3941 S

Gissane, W.

THE STAGES OF DEVELOPMENT AND THE ORGANIZATION OF THE BIRMINGHAM ACCIDENT HOSPITAL.

Birmingham Univ. (England)/ Birmingham Accident Hospital, Road Injuries Research Group (England). Dec. 1963. 3 p. tables.

Postgraduate Medical Journal, Vol. 39, Dec. 1963, pp. 683-686.

JRJE Emergency Room, Hospital Care, Recovery of Injured, Accident
KLC School/Hospital, Zone/Land Usage, Space
JN Injury/Trauma
WSI Autopsy/Pathology, Medical, Methods
YEF Data Statistics, Contents, Study-Report Type
VN Epidemiology/Etiology, Disciplines

Points out importance of autopsy for teaching and research, which are stressed as part of accident department. Sites of fractures, types of major soft tissue injuries, and complications for 500 autopsies following road accidents are tabulated.

01-3948 S

Pike, M. C./ Proctor, D. M./ Wyllie, J. M.

ANALYSIS OF ADMISSIONS TO A CASUALTY WARD.

Aberdeen Univ., Dept. of Statistics (Scotland)/ Aberdeen Royal Infirmary, Casualty Dept. (Scotland). 1963. 3 p. figs. ref.

British Journal of Preventive and Social Medicine, Vol. 17, 1963, pp. 172-176.

JRJE Emergency Room, Hospital Care, Recovery of Injured, Accident
L Time
WSC Diagnosis, Medical, Methods
VN Epidemiology/Etiology, Disciplines
YCF Systems Study, Nature of Study, Study-Report Type

Describe work of a short-stay casualty ward in Aberdeen, Scotland, during 1961, giving number of patients, average duration of stay, and number subsequently transferred for various diagnostic classes. Break-down of admissions by month and day of week. Assuming a Poisson distribution of arrivals and comparing number of admissions with the number expected, it is shown that bed occupancy can be predicted with fair accuracy.

01-3955 N

Noer, R. J.

EMERGENCY CARE OF CRITICALLY INJURED.

Louisville Univ. School of Medicine, Dept. of Surgery, Kentucky. July 1963. 9 p. ref.

BIBLIOGRAPHY

Journal of Trauma, Vol. 3, July 1963, pp. 331-339.
Conference: American Association for the Surgery of Trauma, 22nd annual, 29-31 Oct. 1962, Hot Springs, Virginia.

WSB First Aid, Medical, Methods
JNX Multiple Severe Injuries, Injury/Trauma, Accident
JRJE Emergency Room, Hospital Care, Recovery of Injured, Accident
KLC School/Hospital, Zone/Land Usage, Space

The article focuses on the system developed at Louisville General Hospital where 30% of operations are on emergency basis. After rapid evaluation in emergency room, the injured person is taken on the same litter to an operating suite which has necessary staff immediately available. Operating suite has its own X-ray equipment, since X-rays have been found to be a major factor in admission delay. There is also a postoperative recovery room.

01-3956 N

Worman, L. W./ Cook, H. E./ King, J. M.
THE TRAUMA PATIENT VS. EMERGENCY CARE: THE ROLE OF THE EMERGENCY HOSPITAL.
Milwaukee County Hospital, Wisconsin/ Marquette Univ. School of Medicine, Div. of Surgery, Milwaukee, Wisconsin. July 1963. 9 p. figs. tables.
Journal of Trauma, Vol. 3, July 1963, pp. 340-348.
Conference: American Association for the Surgery of Trauma, 22nd annual, 29-31 Oct. 1962, Hot Springs, Virginia.

KLC School/Hospital, Zone/Land Usage, Space
JRJE Emergency Room, Hospital Care, Recovery of Injured, Accident
WSB First Aid, Medical, Methods
WSE Therapeutic
JN Injury/Trauma
YCD Survey, Nature of Study, Study-Report Type
VN Epidemiology/Etiology
SC Economics, Socioeconomic Aspect

Administrators of county emergency hospital argue that emergency hospital is expensive, delays definitive care of patient, prevents maintenance of efficient operating-room staff, and is not good training for surgical residents. Emergency hospital is termed particularly detrimental to trauma victim who has most to gain from diagnostic, surgical, and convalescent facilities available in modern general hospital.

01-3970 N

Bauer, K. H.
GRUNDSATZLICHES ZUR FRAGE DER UNFALL-HEILKUNDE. [FUNDAMENTALS OF THE THERAPY OF TRAUMA.]
1953. 5 p. figs.
Langenbecks Archiv fuer Klinische Chirurgie, Vol. 276, 1953, pp. 280-289.

JN Injury/Trauma, Accident
VN Epidemiology/Etiology, Disciplines
WSE Therapeutic, Medical, Methods

Author discusses etiology of trauma, and frequency of injuries by body areas and also of certain combinations of

injury. Refers to high incidence of head injury (46%) and relative mortality rate (67.0%); low mortality rate of patients who had injuries to extremities only; and increased mortality of combinations which involve thorax and/or abdomen. Emphasis on requirements of neurosurgeon, and trauma surgeon with training for thorax-abdominal injuries.

01-4008 N

McCarroll, J. R./ Braunstein, P. W./ Cooper, W./ Helpern, M./ Seremetis, M./ Wade, P. A./ Weinberg, S.
FATAL PEDESTRIAN AUTOMOTIVE ACCIDENTS.
Cornell Univ. Medical College, Dept. of Public Health, New York/ Cornell Univ. Medical College, Dept. of Surgery, New York/ New York City Police Dept./ New York City, Office of the Chief Medical Examiner. 14 April 1962. 7 p. tables. ref.
American Medical Association. Journal, Vol. 180, No. 2, 14 April 1962, pp. 127-133.

EM Pedestrians, People
JNB Fatal, Injury/Trauma, Accident
NKFP Period, Frequency/Time, Operating Conditions, Physical Aspect
JNX Multiple Severe Injuries

After study of 200 cases, authors describe and discuss factors involved in the accident situation, analyze injuries with respect to body site, number, effect on survival time and cause of death, and discuss importance and diagnosis of occult lesions. Data statistics: median age; incidence of alcohol in the blood; incidence of traffic violators; incidence of mechanical defects in vehicles; number of injuries and survival time; site of injury and survival time; number of occult injuries and site of injury.

01-4010 N

Wade, P. A.
THE INJURED PATIENT AND THE SPECIALIST.
Cornell Univ. Medical College, New York, New York. March-April 1962. 7 p. photos. figs. graphs. tables.
American College of Surgeons. Bulletin, Vol. 47, March-April 1962, pp. 73-82, 94.

JN Injury/Trauma, Accident
WS Medical, Methods
VN Epidemiology/Etiology, Disciplines

Discusses increasing incidence of trauma and the role of the automobile. Discusses the vehicle design changes suggested by the Cornell Group. Reviews the current state of emergency services. Discusses the necessity for physicians with a broad understanding of trauma.

01-4012 S

Hodge, P. R.
FATAL TRAFFIC ACCIDENTS IN ADELAIDE.
Adelaide Univ., Dept. of Pathology (Australia). 3 March 1962. 6 p. figs. tables. charts. ref.
Medical Journal of Australia, Vol. 1, No. 9, 3 March 1962, pp. 309-314.

JNB Fatal, Injury/Trauma, Accident
VN Epidemiology/Etiology, Disciplines
L Time

Author surveys 174 traffic accident fatalities. Data statistics: overall road accident distribution; age, sex, and

BIBLIOGRAPHY

mode of transportation; monthly distribution; daily distribution; distribution according to time of day; distribution of injuries; blood alcohol levels; type of injury and mode of transportation.

01-4015 N

Wade, P. A.

THE ACCIDENT SURGERY OF MOTORWAYS.

Nov. 1961. 7 p. tables. figs. graphs. ref.

Journal of Bone and Joint Surgery, Vol. 43B, No. 4, Nov. 1961, pp. 634-646.

JN Injury/Trauma, Accident
WSD Surgery, Medical, Methods
VN Epidemiology/Etiology, Disciplines
YCK Case Studies, Nature of Study, Study-Report Type

Author discusses the prevention of motor accidents, describing automobile design changes which prevent or modify injuries; discusses transport of the injured and emergency room treatment. Describes 3 cases to illustrate the frequent multiple nature of injuries. Discusses the role of the orthopedic and the general surgeon.

01-4016 S

Hampson, K. W.

EPIDEMIOLOGY OF TRAFFIC CASUALTIES IN THE CANADIAN ARMED FORCES DURING 1959.

Canadian Forces Medical Service. Nov. 1961. 11 p. graphs. figs. tables. ref.

Medical Services Journal, Canada, Vol. 17, Nov. 1961, pp. 711-731.

Conference: Canadian Public Health Association, Epidemiology Section, annual, June 1961, Regina, Canada.

JNB Fatal, Injury/Trauma, Accident
VN Epidemiology/Etiology, Disciplines

Author analyzed 1,500 cases. Discusses findings from epidemiological viewpoint. Presents map of accident sequence stream. Discusses the physical laws related to injury production. Notes that some features are common to military and total populations. Recommends further parallel examinations. Data statistics: incidence of traffic deaths; type of accident; time of accident; day of accident; month of accident; mortality; hospital morbidity; accident rate/command; accident rate/province and service; accident rate/age group; accident rate/rank and service.

01-4017 N

Kubryk, D.

TRAFFIC ACCIDENTS IN CANADA.

Canadian Dept. of National Health and Welfare, Epidemiology Div., Ottawa, Ontario/ Canadian Highway Safety Council, Ontario. Nov. 1961. 5 p. tables.

Medical Services Journal, Canada, Vol. 17, Nov. 1961, pp. 735-742.

JN Injury/Trauma, Accident
VN Epidemiology/Etiology, Disciplines

Author presents data which show the extent of the traffic accident problem. Discusses causes in terms of host, agent and environment. Describes Canadian accident

prevention organizations and briefly outlines their activities.

01-4024 S

Caldwell, L. A.

AMBULANCE SERVICES AND TRAFFIC CASUALTIES: Report of the Cornwall Area Traffic Casualty Study December 1, 1959 to November 30, 1960.

March 1961. 7 p. figs.

Ontario Medical Review, Vol. 28, March 1961, pp. 172-182.

Sponsor: Ontario Medical Association, Committee on the Medical Aspects of Traffic Accidents, Canada.

L Time
DEHL Ambulance, Special Purpose, Motor Vehicles, Vehicle
IQ Hospitals, Services
JNB Fatal, Injury/Trauma, Accident
YEF Data Statistics, Contents, Study-Report Type
NKFP Period, Frequency/Time, Operating Conditions, Physical Aspect
WSB First Aid, Medical, Methods
YCD Survey, Nature of Study

Describes findings of 1960 Ontario study. For 107 accidents in which casualties were transported by ambulance, data cards were filled out by police, ambulance operators, and hospital admitting and emergency departments. Table shows for urban and rural accidents average time from moment of accident to notification of police, from notification of police to notification of ambulance, from notification of ambulance to arrival at accident scene, from arrival to departure from accident scene, and from departure from accident scene to arrival at hospital.

01-4095 N

Brass, A.

MEDICINE IN SOUTH VIETNAM TODAY.

Part 5: Vung Tau-Australian troops, American helicopters and Sydney doctors.

25 March 1967. 8 p. photos.

Medical Journal of Australia, Vol. 1, 25 March 1967, pp. 614-621.

DDCD Helicopters, Airborne, Power Vehicle, Vehicle
JRH Transportation, Recovery of Injured, Accident
IO Hospital, Services
NKFF Delay, Frequency/Time, Operating Conditions, Physical Aspect

2nd Field Ambulance, providing medical care for 5000 Australians, is described, mentioning 30-mile radius of helicopter transportation and usual maximum of 30 minutes before treatment in hospital. Dengue, malaria, hemorrhagic fever, and encephalitis are cited as health problems.

01-4096 S

Corcoran, J./ Collins, P. G./ Gallagher, J. E./ Coolican, J. E./ Montgomery, D./ O'Dea, J. St. L./ Lavelle, E. F.

ACCIDENT AND EMERGENCY SERVICES IN DUBLIN.

Irish Medical Association, Dublin (Ireland). March 1967. 8 p. tables. figs.

Irish Medical Association Journal, Vol. LX, No. 357, March 1967, pp. 71-78.

BIBLIOGRAPHY

WSC Diagnosis, Medical, Methods
 JRH Transportation, Recovery of Injured, Accident
 IO Hospital, Services
 YEF Data Statistics, Contents, Study-Report Type
 VN Epidemiology/Etiology, Disciplines
 XT Medical, Equipment

Study covers 9,538 emergencies treated in eleven hospitals. Frequencies for accident and non-accident cases and mode of transportation are tabulated separately for each hospital. Nature of injuries is tabulated, showing total number, number admitted to wards, and whether emergency operation was performed. Criticisms of existing services and requirements, accommodations, and equipment for Accident Emergency Center are discussed.

01-4097 S

King, B. G./ Sox, E. D.
EMERGENCY MEDICAL SERVICE SYSTEM - ANALYSIS OF WORKLOAD.
 Public Health Service, Injury Control Program, Arlington, Virginia/ San Francisco City and County Health Department, California. Nov. 1967. 14 p. tables. ref.
Public Health Reports, Vol. 82, No. 11, Nov. 1967, pp. 995-1008.

YCD Survey, Nature of Study, Study-Report Type
 NKFF Delay, Frequency/Time, Operating Conditions, Physical Aspect
 IQ Ambulance, Services
 XT Medical, Equipment
 QD Teaching/Training, Educational Aspect
 YEF Data Statistics, Contents, Study-Report Type
 VN Epidemiology/Etiology, Disciplines
 WSB First Aid, Medical Methods

The first attempt at systems analysis of an urban emergency medical service system. Authors describe 1963-1964 San Francisco study to develop methodology and data as partial basis for improving emergency care system. Tabulate: frequencies of ambulance and non-ambulance patients by residence, race, sex; etiology of trauma, diagnoses; means of arrival of non-ambulance patients by nature of emergency, time spent in emergency room. Analyze workload of ambulance service by: place of emergency; situation at scene; time spent; patient management; frequency of equipment and supplies used; frequency and location of specific action taken by ambulance crew. Discussion emphasizes radio communication, training of personnel, and economic aspects.

01-4102 S

Kossuth, L. C.
A SURVEY OF EMERGENCY AMBULANCE SERVICE.
 Sept. 1967. 2 p. ref.
Traffic Safety Research Review, Sept. 1967, pp. 73-74.

YCD Survey, Nature of Study, Study-Report Type
 IQ Ambulance, Services
 XT Medical, Equipment
 WSB First Aid, Medical, Methods

Author surveyed 133 cities and towns. No agency controlled establishment of ambulance services in 38%. Less than 60% specified first aid equipment. In general, requirements for ambulance attendant training were inadequate. Author discusses establishment of local

ambulance services, equipment requirements, and attendant training.

01-4114 S

Crighton, H. C./ Giesecke, A. H.
ONE YEAR'S EXPERIENCE IN THE ANESTHETIC MANAGEMENT OF TRAUMA: 1964.
 Parkland Memorial Hospital, Dallas, Texas/ Texas Univ., Southwestern Medical School, Dallas. Nov.-Dec. 1966. 5 p. figs. ref. tables.
Anesthesia and Analgesia Current Researches, Vol. 45, Nov.-Dec. 1966, pp. 835-842.
 Conference: International Anesthesia Research Society, 40th congress, 27 Feb.-3 March 1966, Bal Harbour, Florida.

JN Injury/Trauma, Accident
 WSF Anesthesia, Medical, Methods
 WSE Therapeutic
 YEF Data Statistics, Contents, Study-Report Type
 VN Epidemiology/Etiology, Disciplines

Historic survey of literature and analysis of 1161 cases. Authors conclude that patients require rapid assessment in the emergency room as well as the operating theater. List and discuss factors which influence anesthetic management. Discussion following paper. Data statistics: cause of injury; surgical service and number of deaths; premedication; lowest systolic blood pressure before, during, after operation; maintenance relaxant; primary anesthetic agent; total anesthesia time; primary anesthetic technique; fluid and blood therapy before and during operation.

01-4120 S

Braunstein, P. W.
MEDICAL ASPECTS OF AUTOMOTIVE CRASH INJURY RESEARCH.
 Automotive Crash Injury Research, New York, New York. 26 Jan. 1957. 7 p. fig. tables. ref.
American Medical Association. Journal, Vol. 163, No. 4, 26 Jan. 1957, pp. 249-255.

JN Injury/Trauma, Accident
 JNB Fatal
 YCC State-of-the-Art, Nature of Study, Study-Report Type
 VN Epidemiology/Etiology, Disciplines
 YEF Data Statistics, Contents, Study-Report Type

Describes the epidemiologic study established at Cornell University Medical College in 1952. Reviews literature. Statistical data are available on overall degree of injury, degree of fatal injury by number of body areas involved, distribution of injuries among six body areas, and percentage of injured persons receiving injury to each body area, with degree of severity in each.

01-4175 S

Lehman, S. P./ Hollingsworth, K. H.
AMBULANCE SERVICE IN SEATTLE.
 Seattle Dept. of Public Health, Washington, 1960. 9 p. tables. ref.
Public Health Reports, Vol. 75, April 1960, pp. 343-351.

IQ Ambulance, Services
 YCD Survey, Nature of Study, Study-Report Type

BIBLIOGRAPHY

YEF Data Statistics, Contents, Study-Report Type
 VN Epidemiology/Etiology, Disciplines
 SCE Costs/Benefits, Economics, Socioeconomic Aspect

Authors analyze data; describe and discuss general service, method of operation, traffic demands and driver training. Review situation in other cities. Suggest advanced training of ambulance drivers. Data statistics: reporting service; cost to city; disposition of patient; time of call; age; cause of emergency service. Description of survey of ambulance service in 100 cities.

01-4179 N

SUGGESTIONS FOR COMMUNITY ACTION ON EMERGENCY MEDICAL SERVICES.

American Medical Association, Commission on Emergency Medical Services, Chicago, Illinois. n.d. 9 p.

WSB First Aid, Medical, Methods
 JRGI Professional/Physician, Treatment/ Care, Recovery of Injured, Accident
 IO Hospital, Services
 IQ Ambulance
 QD Teaching/Training, Educational Aspect

Suggestions are designed to aid in the formation of community action programs. Authors discuss organization structure and evaluation of existing emergency systems. Describe general guidelines for the four phases of an emergency system (first aid, communications, transportation, emergency facilities).

01-4183 N

Eiseman, B.
COMBAT CASUALTY MANAGEMENT IN VIETNAM.
 Kentucky Univ., Lexington, Medical School, Dept. of Surgery. 1967. 11 p.
Journal of Trauma, Vol. 7, No. 1, 1967, pp. 53-63.

WSBCR Resuscitation, Maintaining Airways, First Aid, Medical, Methods
 WSD Surgery
 WSE Therapeutic
 DDCD Helicopters, Airborne, Power Vehicle, Vehicle
 YER General Discussions, Contents, Study-Report Type

Describes type of combat and resulting type of casualties. Discusses the new chain of evacuation to local hospitals, to Guam and Japan, and/or via Clark Air Force Base in the Phillipines to the U.S. Speed of rescue, treatment by properly trained Corpsmen, and immediate surgery facilities are described. Helicopter action is significant. Resuscitation is discussed. Types of solutions and blood requirements are covered. Soft tissue wounds, head injuries, chest injuries, vascular surgery, and abdominal injuries are discussed.

01-4186 S

Herzog, K.
UNTERSUCHUNGEN ÜBER DIE EIGNUNG CHIRURGISCHER ABTEILUNGEN ZUR VERSORGUNG VON VERKEHRSUNFALLVERLETZTEN. [INVESTIGATIONS ABOUT THE ADEQUACY OF EMERGENCY HOSPITALS FOR THE MEDICAL CARE OF VICTIMS OF TRAFFIC ACCIDENTS].

1962. 4 p. maps. tables.
Hefte zur Unfallheilkunde, Vol. 71, 1962, pp. 174-181.

IO Hospital, Services
 YCD Survey, Nature of Study, Study-Report Type
 WS Medical, Methods
 XT Medical, Equipment

Author discusses problems in West Germany caused by lack of knowledge of exact location of good emergency hospitals. Patients often are taken to the hospital by laymen or by physicians who do not know the local environment at the scene of the accident.

Author prepared a road map containing pertinent data about all qualified emergency hospitals.

01-4190 N

King, B. G.
ESTIMATING COMMUNITY REQUIREMENTS FOR THE EMERGENCY CARE OF HIGHWAY ACCIDENT VICTIMS.

Public Health Service, Injury Control Program, Ohio. 1966 approx. 10 p. figs.

JN Injury/Trauma, Accident
 JR Recovery of Injured
 JRH Transportation, Recovery of Injured, Accident
 JRGI Professional/Physician, Treatment/ Care
 WS Medical, Methods

Author describes and discusses importance, problems, and goals of a community system. Provides some numbers which will be of use in exploratory studies. Notes that, at present, early detection of the injured is the most difficult requirement to fulfill.

01-4193 N

Waters, J. M., Jr.
THE BLOODY LANES.
 National Highway Safety Bureau, Div. of Emergency Treatment and Transfer of the Injured, Washington, D.C. July 1967. 8 p.
Aid Newsletter, Vol. 2, No. 12, July 1967.

DDCD Helicopters, Airborne, Power Vehicle, Vehicle
 JRGI Professional/Physician, Treatment/ Care, Recovery of Injured, Accident
 QD Teaching/Training, Educational Aspect

Review of current status of emergency treatment of highway accident victims. Author discusses need; problems; current legislation; economics; ambulance service, personnel; work of National Highway Safety Bureau; role of federal and state governments, community, physicians. Reproduces Highway Safety Program Standard 4.4.11, "Emergency Medical Services."

01-4194 N

McDougall, R.
PILOT STUDY ON TRAFFIC ACCIDENTS.
 1 Jan. 1959. 5 p. tables. ref.
Canadian Medical Association Journal, Vol. 80, 1 Jan. 1959, pp. 18-22.
 Sponsor: Ford Motor Company of Canada.

JN Injury/Trauma, Accident

JNB Fatal
YCD Survey, Nature of Study, Study-Report Type
VN Epidemiology/Etiology, Disciplines
IO Hospitals, Services

Study covers 6-month period in Montreal. Author discusses problems, advantages and limitations of collecting morbidity data from hospital records. Lists minimum information for accident histories. Recommends further studies of this nature, particularly in relation to cause and prevention of accidents. Recommends that hospital records of all accidents be coded according to etiology. Data statistics: number of accident cases treated at hospital and total number in the city; means of transportation to hospital; ambulance runs to hospital - accidents and other causes; types of accidents; types of vehicle accidents; age; sex; pedestrian or driver; time of accident; types of injuries treated in emergency room; types of injuries admitted to hospital; percent of dangerous and fatal injuries by body area.

01-4529 S

Heikel, H. V. A.
TRAFIKOLYCKSFALLSSKADORNAS FORANDRINGAR UNDER 10-ÅRSPERIODEN 1951-1960. [CHANGES IN TRAFFIC ACCIDENT INJURIES FOR THE TEN-YEAR PERIOD OF 1951-1960.]
11 Feb. 1965. 9 p. ref. figs. tables.
Nordisk Medicin, Vol. 73, 11 Feb. 1965, pp. 125-133.
Order No: STS 6330 (English translation).

YCD Survey, Nature of Study, Study-Report Type
YEF Data Statistics, Contents, Study-Report Type
JN Injury/Trauma, Accident
VN Epidemiology/Etiology, Disciplines

Extensive analysis of 1,831 cases dead on arrival or admitted to Bjorneborg General Hospital, Finland. Data statistics: age; sex; rate of cases in population; number of cases per month; residence of injured; means of travel; distribution by day of week, hour; type of accident; site of injury, type of vehicle; type of skull injury, type of vehicle; length of hospitalization; hospitalization cost; loss of working time; mortality; time and place of death; cause of death.

01-4535 N

COMMUNITY-WIDE EMERGENCY MEDICAL SERVICES.
American Society of Anesthesiologists, Committee on Acute Medicine, Park Ridge, Illinois. 13 May 1968. 8 p. ref.
American Medical Association Journal, Vol. 204, No. 7, 13 May 1968, pp. 595-602.

JRGF First Aid (Red Cross), Treatment/ Care, Recovery of Injured, Accident
JRH Transportation, Recovery of Injured, Accident
JRJ Hospital Care
WSBCR Resuscitation, Maintaining Airways, First Aid, Medical, Methods

Authors list and discuss recommendations for emergency medical care at the scene, during transportation, and in hospitals. These recommendations are not minimum standards but rather goals based on presently available techniques. Recommend that the goals be reviewed and upgraded periodically.

02-3700 N

Lob, A.
CHIRURGISCHE PROBLEME DER STRASSENVERKEHRSUNFÄLLE UND IHRE BEDEUTUNG FÜR DIE ALLGEMEINHEIT. [SURGICAL PROBLEMS OF TRAFFIC ACCIDENTS AND THEIR SIGNIFICANCE FOR THE GENERAL PUBLIC.]
1960. 16 p. tables. photos.
Medizinische Klinik, Vol. 55, 1960, pp. 875-890.

JRGI Professional/Physician, Treatment/Care, Recovery of Injured, Accident
DEH Special Purpose, Motor Vehicles, Vehicle
OAI Head, Anatomy/Body, Biomedical Aspect
OANBC Spinal Cord, Central, Nervous System
OALE Lungs, Respiratory System
OALG Mediastinum
OAKC Blood Vessels, Cardiovascular System
OAE Abdomen

Author discusses the etiology of trauma in Germany, and statistical data from insurance companies and hospitals. First aid by physician on the scene of an accident is considered. Zuckschwerdt in Hamburg has considered it unfeasible. Bauer's mobile unit in the Mannheim-Heidelberg area is mentioned. At the scene of an accident, no ultimate therapy is advisable; only stabilization of the patient is necessary to make him fit for transportation. Conditions or dangers to be handled are: aspiration, shock and hemorrhage.

Suckert is mentioned (city of Linz), who has a mobile unit containing also surgical equipment for amputations, tracheostomy set, and drugs to treat (or prevent) brain edema in head injury cases.

Organization of the hospital Emergency Room is discussed. Specific injuries and therapy are discussed: head, spine, thorax, heart and great vessels, abdomen. Frequency and mortality rates are given. Some case studies are included.

Final recommendations include overall prevention, education, training of ambulance personnel, use of helicopter, combination of physician at scene and qualified means of transportation, better hospital care.

02-3714 S

ERSTE HILFE AM UNFALLORT UND ERSTVERSORGUNG VERKEHRSVERLETZTER NACH KLINIKKAUFNAHME. [FIRST AID AT SCENE OF ACCIDENT AND FIRST THERAPY AFTER ADMISSION TO EMERGENCY ROOM.] See 03-3714 S

02-3718 S

Wilder, R. J./ Jude, J. R./ Kouwenhoven, W. B./ McMahon, M. C.
OF 153 ATTEMPTED - CARDIOPULMONARY RESUSCITATIONS BY TRAINED AMBULANCE PERSONNEL - NO FATAL INJURIES WERE PRODUCED.
Johns Hopkins Hospital/ Baltimore City Hospital/ Johns Hopkins Univ. School of Medicine/ Baltimore City Fire Dept., Maryland. 1964. 4 p. tables.
American Medical Association Journal, Vol. 190, No. 6, 9 Nov. 1964, pp. 139-142.

OAK Cardiovascular System, Anatomy/Body, Biomedical Aspect
OAL Respiratory System
QD Teaching/Training, Educational Aspect
YEF Data Statistics, Contents, Study-Report Type

BIBLIOGRAPHY

L Time
YCK Case Studies, Nature of Study
WSI Autopsy, Medical, Methods

Authors analyze 153 reports. Describe training of personnel and discuss results. Recommend procedure. Data statistics: interval between receipt of call and first aid treatment (range and mean); transportation time (range and mean); age range; etiology; results; post-mortem findings. Fifteen illustrative case reports.

02-3740 S

Lehmann, H. D.
KOMPLIKATIONEN NACH SCHWEREM GEDECKTEM SCHÄDELHIRNTRAUMA IM KLINISCHEN UND MORPHOLOGISCHEN BEFUND. [CLINICAL AND MORPHOLOGICAL FINDINGS IN COMPLICATIONS FOLLOWING SEVERE CLOSED CEREBROCRANIAL TRAUMA.]
1964. 11 p. tables. photos.
Bruns Beiträge zur Klinischen Chirurgie, Vol. 208, June 1964, pp. 480-501.

OAI Head, Anatomy/Body, Biomedical Aspect
OANBB Brain, Central, Nervous System
JNF Thorax, Injury/Trauma, Accident
JNP Consequences
L Time
YCK Case Studies, Nature of Study, Study-Report Type
WSBCR Resuscitation, Maintaining Airways, First Aid, Medical, Methods

Author obtains reference material from 1956-1960, in Cologne, and clinical observations carried out by mobile surgical unit with physician at the scene of the accident. Of 28 patients discussed, 24 had multiple injuries, including 16 of the 17 fatalities. All were treated conservatively.

Two separate phases are considered: acute disturbances immediately after the accident and late complications.

The value of tracheostomy in the acute phase is discussed. Author tabulates for all cases the ages, associated injuries, time of unconsciousness, time of tracheostomy, acute complications, time of survival, late complications and remarks.

Time of onset of acute and of late complications, respiration rate, pulse, temperature, neurologic symptoms, and autopsy findings for cause of death are also given.

02-3748 S

Hamelmann, H.
MÖGLICHKEITEN UND GRENZEN ÄRZTLICHER HILFELEISTUNGEN AM UNFALLORT. [POSSIBILITIES AND LIMITATIONS OF MEDICAL ASSISTANCE AT THE SCENE OF A DISASTER].
17 Nov. 1964. 3 p. figs.
Langenbecks Archiv fuer Klinische Chirurgie, Vol. 308, 17 Nov. 1964, pp. 41-44.

JRGI Professional/Physician, Treatment/Care, Recovery of Injured, Accident
WSB First Aid, Medical, Methods
YEF Data Statistics, Contents, Study-Report Type
JRID Dead on Arrival, Hospital Admission
JNPJ Aspiration/Dehydration, Consequences, Injury/Trauma

OAI Head, Anatomy/Body, Biomedical Aspect
JNPL Shock

Two hundred emergency cases were analyzed in Bayern from the records of the Red Cross which is the agency providing all ambulance services in that province. Ten to fifteen minutes was the total delay from time of call to delivery in the hospital for urban accidents, and 20-30 minutes for rural accidents. To evaluate quality of first aid rendered on the scene, 123 autopsy records (1953-1963) were reviewed of accident victims that arrived in the clinic as D.O.A. or were dead within 48 hours. 17% had died on the scene. Etiology of trauma and frequency of various types of injury are shown. 55% of autopsy material died from the consequence of head injury; 20% from shock, 4% from aspiration, 6.5% of fat embolism.

The severity of head injuries can be reduced if anoxia as a result of obstructed airways or inadequate ventilation is prevented. Author considers the need for medical capability at the scene to reduce morbidity of an accident. First aid training is not adequate to cope with head injury, shock, aspiration.

02-3762 N

Böhler, J.
DRINGLICHKEIT DER VERSORGUNG BEI UNFALL-VERLETZTEN. [URGENCY OF ACCIDENT INJURY CARE.]
1 Feb. 1964. 4 p.
Medizinische Welt, Vol. 5, 1 Feb. 1964, pp. 229-232.

JR Recovery of Injured, Accident
YCC State-of-the-Art, Nature of Study, Study-Report Type

Author discusses triage essentially in hopeless cases, severely injured cases needing immediate attention to maintain proper ventilation and treatment for shock, injured patients requiring surgical treatment, and light injuries.

Transportation, especially indication (or not) for air transport, is discussed.

A list of priorities and details of emergency treatment are covered.

02-3764 N

Spitz, W. U.
BEFUNDE BEI VORUBERGEHENDER WIEDERBELEBUNG NACH ELEKTROUNFALL. [FINDINGS IN TEMPORARY RESUSCITATION FOLLOWING ACCIDENTAL ELECTROCUTION.]
Freien Universität, Institut für gerichtliche und soziale Medizin, Berlin (Germany). March 1964. 4 p.
Munchener medizinische Wochenschrift, Vol. 106, March 1964, pp. 495-498.

WSBCR Resuscitation, Maintaining Airways, First Aid, Medical, Methods
JNPM Anoxia/Hypoxia, Consequences, Injury/Trauma, Accident
JNPH Pneumonia
YCK Case Studies, Nature of Study, Study-Report Type

Report on a young man delivered as D.O.A. to the hospital after an electrical shock, followed by an immediate attempt at resuscitation and another by firemen five

minutes later, both unsuccessful. Ten minutes after arrival at hospital, thoracotomy heart massage at the hospital showed first signs of spontaneous respiration. Heart fibrillation continued for about 30 minutes. Defibrillation was carried out. Heart became rhythmic and normal. Normal reflexes reappeared. Continued unconsciousness. Central hyperthermia on second day, corrected by external hypothermia; EKG normal.

Sudden death on third day. Autopsy findings are discussed. Hypoxic brain damage (9-10 minutes without pulse at time of accident). Recommendations are made for vigorous attempts at cardiopulmonary resuscitation on the scene of the accident. The four to six minute anoxia-tolerance of the neurons is pointed out again.

02-3774 S

Jude, J. R./ Kouwenhoven, W. B./ Knickerbocker, G. G.
CARDIAC ARREST: Report of application of external cardiac massage on 118 patients.

Johns Hopkins Univ. School of Medicine, Dept. of Surgery, Baltimore, Maryland/ Johns Hopkins Hospital, Dept. of Surgery, Baltimore, Maryland. 16 Dec. 1961. 8 p. photos. tables. figs.

American Medical Association Journal, Vol. 178, No. 11, 16 Dec. 1961, pp. 1063-1070.

Sponsor: Edison Electric Institute, New York/ National Institutes of Health, Maryland/ Maryland Heart Association, Baltimore.

OAK Cardiovascular System, Anatomy/Body, Biomedical Aspect
WSBCR Resuscitation, Maintaining Airways, First Aid, Medical, Methods
YEF Data Statistics, Contents, Study-Report Type

Evaluate and carefully describe a method of producing artificial circulation by external sternal compression, used in 138 episodes of cardiac arrest in 118 patients, restoring cardiac action in 78% of arrests. Cardiotonic drugs, electrocardiograms, defibrillation, and continued cardiovascular and pulmonary support were employed as needed. Describe causes and history of treatment for cardiac arrest.

02-3777 N

Rowe, N. L.
FIRST AID TREATMENT, DIAGNOSIS AND ROENTGENOGRAPHY OF MAXILLOFACIAL INJURIES.

British Association of Oral Surgeons, London (England). May 1964. 4 p. figs.

Journal of Oral Surgery, Anesthesia and Hospital Dental Service, Vol. 22, May 1964, pp. 202-208.

Conference: International Conference on Oral Surgery, 1st, July 1962, London.

WSB First Aid, Medical, Methods
WSC Diagnosis
WSBC Maintaining Airways
OAIE Maxilla, Head, Anatomy/Body, Biomedical Aspect
JNH Fracture, Injury/Trauma, Accident
OAL Respiratory System

With maxillofacial injuries, prime consideration must be given to preservation of life, maintenance of function, and restoration of appearance. In immediate post-traumatic phase, acute respiratory obstruction will kill patient more rapidly than will a relatively slowly declining

blood pressure or a gradually increasing intracranial pressure. Lists causes of respiratory obstruction, methods of preventing inhalation, and indications for tracheostomy. Describes methods of diagnosis and use of roentgenography.

02-3795 N

Wagner, C. J.
THE MEDICAL SELF-HELP TRAINING PROGRAM.
Public Health Service, Washington, D.C. 1963. 3 p. fig.
Journal of Trauma, Vol. 3, 1963, pp. 326-330.
Conference: American Association for the Surgery of Trauma, 21st annual, 28-30 Sept. 1961, Chicago, Illinois.

QD Teaching/Training, Educational Aspect
WSB First Aid, Medical, Methods

Urges that families be able to care for own health needs in war or peacetime disaster. The Medical Self-Help program, Training Kit, and the Instructor's Guide are described.

02-3807 N

Foster, P. A./ Martinez, L.
THE PERFORMANCE OF THE ENGSTRÖM VENTILATOR.

Stellenbosch Univ., Dept. of Anaesthesia (South Africa)/ Karolinska Hospital, Thorax Clinic, Stockholm (Sweden). July-Aug. 1966. 2 p. tables. figs. ref.

Anesthesiology, Vol. 27, July-Aug. 1966, pp. 504-507.

YEG Tables/Graphs, Contents, Study-Report Type
XTL Airway Maintenance, Medical, Equipment
XTI Resuscitators
YCG Laboratory Experiment, Nature of Study

Six Engström ventilators were tested for output at zero setting, leakage out of circuit and through pneumatic valve, and calibration of dose valve. Authors conclude that pneumatic valve needs regular checking and cleaning, and that setting of dose valve is unreliable.

02-3808 N

Karl, W. F.
OXYGEN CONCENTRATIONS ACHIEVED WITH MANUAL RESUSCITATOR.

1 Aug. 1966. 1 p. table. fig. ref.
New York State Journal of Medicine, 1 Aug. 1966, pp. 2018-2019.

XTI Resuscitators, Equipment
YCG Laboratory Experiment, Nature of Study, Study-Report Type

Ambu Resuscitator as designed by Ruben and Ruben and test method are described. Oxygen concentrations in percent are tabulated for four levels of oxygen flow. Effect of increasing minute volume ventilation at any level was practically negligible. Because of air dilution, the Ambu bag is not efficient for administering oxygen under intermittent positive pressure.

02-3814 N

Currie, D. J.
EARLY MANAGEMENT OF THE CRITICALLY INJURED.

BIBLIOGRAPHY

St. Michael's Hospital, Dept. of Surgery, Toronto (Canada)/ Toronto Univ., Dept. of Surgery (Canada). 22 Oct. 1966. 9 p. tables. ref.

Canadian Medical Association Journal, Vol. 95, 22 Oct. 1966, pp. 862-870.

Conference: Thunder Bay Medical Society, 18 Nov. 1965, Port Arthur, Ontario.

- WSE Therapeutic, Medical, Methods
 JRGI Professional/Physician, Treatment/Care, Recovery of Injured, Accident
 YEH Diagrams/Plans, Contents, Study-Report Type
 WSBC Maintaining Airways, First Aid, Medical
 OAK Cardiovascular System, Anatomy/Body, Biomedical Aspect
 JNPK Blood Loss/Bleeding, Consequences, Injury/Trauma
 JNPL Shock
 YER General Discussions, Contents, Study-Report Type

Priorities of management for injuries are given, with a detailed plan for actions and observations to be carried out on scene of accident, in emergency department, and in surgical operating room. Laboratory control of P_{O_2} , P_{CO_2} , and pH, endotracheal tubes, tracheostomy, emergency thoracotomy, therapy for cardiac arrest, fibrillation, arrhythmias, and cardiogenic and neurogenic shock are discussed. Reduction in blood volume due to bleeding and fluid loss, as in burns, and control of central venous pressure are discussed.

02-3820 N

Nobel, J. J./ Templeton, J. Y., III.

RESUSCITATION - 1966: An answer to the age-old problems of postponing death in a cardiac or pulmonary emergency takes form in a newly-designed 'mobile unit'. June 1966. 4 p. figs. ref.

Pennsylvania Medicine, Vol. 69, June 1966, pp. 38-41.

- WSBCR Resuscitation, Maintaining Airways, First Aid, Medical, Methods
 XT Medical, Equipment
 OAK Cardiovascular System, Anatomy/Body, Biomedical Aspect
 OAL Respiratory System

Doctors describe the MAX cart they designed, containing cardiopulmonary resuscitation devices and data-acquisition and data-reduction equipment. Less time is required to meet the basic physiologic demands of establishing an airway, ventilation, and artificial circulation. MAX is powered by a 70 amp-hr storage battery and can be kept on charge whenever not in use. MAX's data-acquisition system functions automatically during the clinical procedure, continuously recording on magnetic tape EKG, EEG, and pulse pressure, while recording the resuscitation team's directions, activities, and comments.

02-3845 N

Cardillo, T. E./ Munson, E. T./ Norris, J. L.

CARDIOPULMONARY RESUSCITATION: A TEACHING-TRAINING PROGRAM FOR RESCUE PERSONNEL.

Rochester Univ. School of Medicine and Dentistry, New York/ Eastman Kodak Co., Kodak Park Works, Rochester,

er, New York/ Eastman Kodak Co., Rochester, New York. June 1965. 4 p. illus. ref.

Journal of Occupational Medicine, Vol. 7, No. 6, June 1965, pp. 251-254.

- WSBCR Resuscitation, Maintaining Airways, First Aid, Medical, Methods
 QD Teaching/Training, Educational Aspect
 JR Recovery of Injured, Accident

Authors describe industrial program to train employees in mouth-to-mouth breathing and closed-chest cardiac massage. 1500 employees have been trained in program which includes film and practice on manikin. Found that laymen master technique for closed-chest massage much more readily than that for mouth-to-mouth resuscitation. Warn of complications produced by unskilled individuals.

02-3849 N

IMMEDIATE MEASURES AT SITE OF ACCIDENT.

1966. 13 p. figs.

Journal of Trauma, Vol. 6, No. 2, pp. 285-298.

- JN Injury/Trauma, Accident
 QD Teaching/Training, Educational Aspect
 WSB First Aid, Medical, Methods
 WSC Diagnosis

Translation of German Red Cross publication on first aid, giving instructions in case of traffic accident and describing various situations of acute danger and lifesaving measures to be employed by layman: general positioning of patient, artificial respiration, pressure dressings and pressure points, positioning for patient in shock, and external cardiac massage. Lifting and transport methods are illustrated.

02-3850 N

Davies, J. W. L.

METHODS OF ASSESSMENT OF BLOOD LOSS IN THE SHOCKED AND INJURED PATIENT.

Birmingham Accident Hospital, Industrial Injuries and Burns Research Unit (England). 1966. 5 p. tables. ref.
British Journal of Anaesthesia, Vol. 38, April 1966, pp. 250-254.

- JNPK Blood Loss/Bleeding, Consequences, Injury/Trauma, Accident
 JNPL Shock

Discusses advantages and disadvantages of methods for assessing blood loss, including indices of amount of tissue damage and measurements of limb, plasma, and red-cell volume. Some semi-automatic instruments used are the Volemetron, The Hemolitre, and the Blood Volume Computer. Estimation time varies from 20 minutes with the semi-automatic instruments to 2½-3 hours with radioactive phosphorus.

02-3856 N

Freilich, H.

TEN MUSTS OF A SKILLED AND READY AMBULANCE SERVICE.

1 Dec. 1966. 5 p. figs. refs.

Hospitals, J.A.H.A., Vol. 40, 1 Dec. 1966, pp. 53-57.

BIBLIOGRAPHY

- YER General Discussions, Contents, Study-Report Type
JR Recovery of Injured, Accident
QD Teaching/Training, Educational Aspect

Improved ambulance service is related to cooperation among physicians, hospitals, and local government. Author mentions the New York hospital planning council as an example, discussing communications, staffing, training and supervision of personnel, equipment, receiving hospital, and public relations.

02-3858 S

Smith, H. J./ Anthonisen, N. R.
RESULTS OF CARDIAC RESUSCITATION IN 254 PATIENTS.
15 May 1965. 3 p. tables. ref.
The Lancet, 15 May 1965, pp. 1027-1029.

- YEF Data Statistics, Contents, Study-Report Type
WSBCR Resuscitation, Maintaining Airways, First Aid, Medical, Methods
WUP Physiological, Testing/Measures, Methods
WSI Autopsy, Medical
JNP Consequences, Injury/Trauma, Accident
OAK Cardiovascular, Anatomy/Body, Biomedical Aspect

Reviews results of resuscitation in cardiac arrests occurring in wards or emergency room. Staff of Royal Victoria Hospital, Montreal, had been instructed in external cardiac massage and artificial respiration. Results, incidence of initial arrhythmia, and underlying causes are tabulated. Factors in survival were age, arrhythmia, and etiology, with relatively high survival rate for cardiac arrest as a direct consequence of respiratory failure. Metabolic acidosis and raised arterial-lactate levels were found in most patients soon after arrest.

02-3872 N

Bertrand, G.
MANAGEMENT OF SPINAL INJURIES WITH ASSOCIATED CORD DAMAGE.
McGill Univ., Faculty of Medicine, Montreal (Canada).
March 1965. 14 p. photos. figs.
Postgraduate Medicine, Vol. 37, March 1965, pp. 249-262.

- WSE Therapeutic, Medical, Methods
OANBC Spinal Cord, Central, Nervous System, Anatomy/Body, Biomedical Aspect
JN Injury/Trauma, Accident
YER General Discussions, Contents, Study-Report Type

Management includes handling and transport, traction, alignment, maintenance of airways, emptying of bladder and stomach, and control of temperature. Hidden injuries, muscle functions, sensory testing, hyperalgesia, spinal shock, autonomic system, and X rays are discussed in connection with diagnosis. Therapy to decompress neural structures and to stabilize their bony envelopes and contraindications to surgery are given.

02-3873 N

Walker, J. E. C./ Alper, M. H./ Talbert, G. M.
THE ROLE OF A UNIVERSITY HOSPITAL IN TEACH-

ING EMERGENCY CARE AND DISASTER MANAGEMENT.

Harvard Medical School. March 1965. 5 p. table. ref.
Journal of Medical Education, Vol. 40, March 1965, pp. 305-309.

- KLC School/Hospital, Zone/Land Usage, Space
QD Teaching/Training, Educational Aspect
WSB First Aid, Medical, Methods

Peter Bent Brigham Hospital and Harvard Medical School combined to offer courses to first-aid instructors in local police and fire departments. Provides outline of course offered in ten weekly two-hour sessions. City-wide disaster exercise demonstrated that graduates were not able to perform effective triage.

02-3874 N

Safar, P./ Brose, R. A.
AMBULANCE DESIGN AND EQUIPMENT FOR RESUSCITATION.
Pittsburgh Univ. School of Medicine, Dept. of Anesthesiology, Pennsylvania/ Presbyterian-University Hospital, Pittsburgh, Pennsylvania. March 1965. 4 p. figs. tables. ref.
Archives of Surgery, Vol. 90, March 1965, pp. 343-348.

- DEHL Ambulance, Special Purpose, Motor Vehicles, Vehicle
XTK Oxygen Supply, Medical, Equipment
XTJ Aspirators
WSBCR Resuscitation, Maintaining Airways, First Aid, Medical, Methods
YCH Field Experiment, Nature of Study, Study-Report Type

Describes modifications of conventional ambulance. The following are recommended: access to patient from his vertex for respiratory resuscitation and from his side for external cardiac compression; hand-operated ventilation equipment; powerful suction from ambulance engine or electric motor; large reservoir of oxygen; transparent bag-mask unit for oxygen inhalation; oropharyngeal tubes; and portable equipment for ventilation, oxygen inhalation, and suction.

02-3885 N

Braun, P./ Reitman, N./ Florin, A. A.
CLOSED-CHEST CARDIAC RESUSCITATION: Problems in the training of laymen in volunteer rescue squads.
New Jersey State Dept. of Public Health, Heart and Circulatory Disease Program, Trenton/ Public Health Service, Heart Disease Control Program. 7 Jan. 1965. 6 p. tables. ref.
New England Journal of Medicine, Vol. 272, No. 1, 7 Jan. 1965, pp. 1-6.

- QD Teaching/Training, Educational Aspect
WSBCR Resuscitation, Maintaining Airways, First Aid, Medical, Methods
OAK Cardiovascular System, Anatomy/Body, Biomedical Aspect
OAL Respiratory System

Brief discussion of training program gives results of actual rescue attempts, clinical follow-up, eight-month retest of squad members, and comparative performance after eight months. Minimum requirements are given for

BIBLIOGRAPHY

courses of instruction which are now the standards recommended by New Jersey State Department of Health.

02-3887 N

Schrogie, J. J.

TRAINING IN CARDIOPULMONARY RESUSCITATION.

Public Health Service, Div. of Chronic Diseases, Heart Disease Control Branch. Jan. 1965. 7 p. figs. ref.
Public Health Reports, Vol. 80, No. 1, Jan. 1965, pp. 68-74.

- WSBCR Resuscitation, Maintaining Airways, First Aid, Medical, Methods
- OAK Cardiovascular System, Anatomy/Body, Biomedical Aspect
- OAL Respiratory System
- OAFD Ribs, Thorax
- JNH Fracture, Injury/Trauma, Accident

A brief state-of-the-art report is given for treatment of cardiac arrest, describing extent of the American Heart Association's training programs and giving a survival rate of 25% in summary of 969 cases. Disagreements as to who should perform closed-chest cardiac resuscitation and guidelines for broad educational programs are discussed. New York State's advanced courses for physicians are described.

02-3888 N

Safar, P.

EMERGENCY RESUSCITATION.

1965. 12 p. figs. ref.
Clinical Anesthesia, Vol. 1, 1965, Chapter 4, pp. 71-92.
Contract No: DA-49-193-MD-2160.

- WSBCR Resuscitation, Maintaining Airways, First Aid, Medical, Methods
- OAK Cardiovascular System, Anatomy/Body, Biomedical Aspect
- OAL Respiratory System
- X Equipment
- WSBC Maintaining Airways
- QD Teaching/Training, Educational Aspect

Key concepts in three phases of cardiopulmonary resuscitation are discussed. The following equipment is discussed: Ruben's self-inflating bag-valve-mask unit, Laerdal kit, oxygen-bag-mask unit, and modified Kreiselman resuscitator. Special conditions like drowning and inhalation of gastric contents are mentioned.

02-3905 S

Kaplan, B. M./ Knott, A. P., Jr.

CLOSED-CHEST CARDIAC MASSAGE FOR CIRCULATORY ARREST.

Michael Reese Hospital and Medical Center, Chicago, Illinois. July 1964. 5 p. tables. ref.
Archives of Internal Medicine, Vol. 114, July 1964, pp. 5-12.

Grant No: HE-0673/ HTS-5252.
Sponsor: National Heart Institute.

- YEF Data Statistics, Contents, Study-Report Type
- OAK Cardiovascular System, Anatomy/Body, Biomedical Aspect

- OAL Respiratory System
- WSBCR Resuscitation, Maintaining Airways, First Aid, Medical, Methods
- VN Epidemiology, Disciplines
- WSI Autopsy
- L Time

Discusses 100 consecutive cases, 1961-1963. Careful search was made for pre-arrest clues of impending circulatory arrest. Ventilation was direct mouth-to-mouth or mouth-to-nose breathing. After closed-chest cardiac massage and ventilation had been instituted, electrocardiograph was attached, vein cutdown performed, and intravenous infusion of levarterenol begun. More specific therapeutic approach was then followed for ventricular fibrillation, ventricular standstill, and complete AV dissociation. Reports on incidence of primary admitting diagnoses, significant cardiovascular disease, and results of resuscitative efforts. Relation of interval before massage to results obtained is shown. Initial cardiac rhythm, complications in 28 patients, and pre-arrest EKG in 76 patients are tabulated.

02-3916 N

Littleton, J. T.

ALL-PURPOSE STRETCHER REDUCES TRANSFERS OF ACUTELY INJURED.

Robert Packer Hospital, Guthrie Clinic, Ltd., Sayre, Pennsylvania. 1 Aug. 1964. 5 p. figs. ref.
Hospitals, J.A.H.A., Vol. 38, 1 Aug. 1964, pp. 46-50.

- JRH Transportation, Recovery of Injured, Accident
- XTG Stretchers, Medical, Equipment
- JNX Multiple Severe Injuries, Injury/Trauma

In reply to a survey questionnaire, 300 hospital administrators reported an average of 6.7 manual moves for the average acutely injured patient between street and final hospital bed, with a maximum of eleven. Use of specially designed stretcher and mass-casualty management are discussed.

02-3945 N

Conway, J. P./ Hancock, J. E./ Ginn, W. V., Jr.

VENTRICULAR FIBRILLATION: Seventeen cases with long-term survival in four.

Methodist Hospital, Dept. of Medicine, Memphis, Tennessee. 23 Nov. 1963. 2 p. ref.
American Medical Association. Journal, Vol. 186, No. 8, 23 Nov. 1963, pp. 803-804.

- OAKB Heart, Cardiovascular System, Anatomy/Body, Biomedical Aspect
- WSBCR Resuscitation, Maintaining Airways, First Aid, Medical, Methods
- L Time
- WSE Therapeutic

Patients were treated with an external cardiac defibrillator and closed-chest cardiac massage. A representative case report is provided. Importance of acid-base balance is discussed.

02-3949 S

Lind, B./ Stovner, J.

MOUTH-TO-MOUTH RESUSCITATION IN NORWAY.

Sentralsykehuset, Dept. of Anesthesiology, Akershus

(Norway)/ Norwegian Radium Hospital, Dept. of Anesthesiology, Oslo. 21 Sept. 1963. 3 p. tables. ref.
American Medical Association Journal, Vol. 185, No. 12, 21 Sept. 1963, pp. 933-935.

WSBCRN Mouth-to-Mouth, Resuscitation, Maintaining Airways, First Aid, Medical, Methods
EC Children, People
QD Teaching/Training, Educational Aspect
JNN Asphyxia/Suffocation, Injury/Trauma, Accident
YEF Data Statistics, Contents, Study-Report Type

Follows up Norwegian campaign to teach the public the techniques of oral resuscitation. Of 40 successful rescuers interviewed, 21 had learned the procedure only from printed material or radio. Number of successful resuscitations for 85 victims is shown according to age of victim. Types of accidents and contents of mouth, correlation between duration of artificial ventilation and length of subsequent unconsciousness, and incidence of vomiting and trismus are discussed.

02-3961 S

ERFAHRUNGEN ÜBER ERSTE ÄRZTLICHE HILFE AM UNFALLORT UND AUF DEM TRANSPORT BEI SCHWERVERLETZTEN UND LEBENSBEDROHTEN. [EXPERIENCE ABOUT MEDICAL AID AT THE SCENE OF AN ACCIDENT AND DURING TRANSPORT WITH SEVERELY INJURED PATIENT.] See 03-3961 S

02-3980 S

ÄRZTLICHE HILFE AM UNFALLORT: Erfahrungen eines Versuches in Hamburg. [MEDICAL AID ON THE SITE OF ACCIDENT: Experiences with an experiment of Hamburg.] See 03-3980 S

02-3995 S

Händel, K.
ÜBER DIE ZEITLICHEN ZUSAMMENHÄNGE ZWISCHEN UNFALL UND TOD; DAS ERGEBNIS VON 1000 TÖDLICHEN VERKEHRSUNFÄLLEN. [ON TIME RELATIONS BETWEEN THE ACCIDENTS AND DEATH; THE RESULT OF 1000 FATAL TRAFFIC ACCIDENTS.]
1 Sept. 1964. 4 p. tables. ref.
Deutsche Zeitschrift fuer die Gesamte Gerichtliche Medizin, Vol. 55, 1 Sept. 1964, pp. 187-193.

YEF Data Statistics, Contents, Study-Report Type
NKFP Period, Frequency/Time, Operating Conditions, Physical Aspect
JNB Fatal, Injury/Trauma, Accident

Author determined interval from accident to death for traffic accidents. 45% died within first hour, 69% within first 24 hours. Compares his data with that of other investigators.

02-4000 N

Kraus, H.
ROAD ACCIDENTS: ESSENTIALS IN TREATING CEREBRO-CRANIAL INJURIES.
Vienna Univ., Neurosurgical Clinic. 1963. 7 p. figs.
Ciba Sympos, Vol. 11, 1963, pp. 115-121.

JN Injury/Trauma, Accident
WSE Therapeutic, Medical, Methods
OAlA Skull, Head, Anatomy/Body, Biomedical Aspect
OANBB Brain, Central, Nervous System
WSBC Maintaining Airways, First Aid
OAL Respiratory System

Author reviews and discusses management of cerebro-cranial injuries. Concludes that immediate appropriate measures would prevent many deaths.

02-4019 N

Hügin, W.
EARLY MEDICAL TREATMENT IN CASES OF ASPHYXIATION.
Univ. Surgical Clinic, Anaesthetic Dept., Basle (Switzerland). Sept. 1961. 6 p. ref. figs.
Triangle, The Sandoz Journal of Medical Science, Vol. 5, Sept. 1961, pp. 156-167.

JNN Asphyxia/Suffocation, Injury/Trauma, Accident
JRGI Professional/Physician, Treatment/Care, Recovery of Injured
OAL Respiratory System, Anatomy/Body, Biomedical Aspect
WSBCT Tracheostomy, Maintaining Airways, First Aid, Medical, Methods
YER General Discussions, Contents, Study-Report Type

Comprehensive discussion of first aid measures which require a minimum of equipment. Author describes management of a blocked air passage, lack of spontaneous respiration, cessation of circulation, and problems of transport.

02-4023 N

Peart, A. F. W.
THE INTEREST OF ORGANIZED MEDICINE IN TRAFFIC ACCIDENTS.
Canadian Medical Association, Toronto. 8 April 1961. 4 p. ref.
Canadian Medical Association Journal, Vol. 84, 8 April 1961, pp. 785-788.
Conference: Ontario Medical Association, Section on Industrial Medicine and Industrial Medical Association of the Province of Quebec, annual combined conference, 14 Oct. 1960.

JN Injury/Trauma, Accident
JRGI Professional/Physician, Treatment/Care, Recovery of Injured
YER General Discussions, Contents, Study-Report Type

Author reviews the work of the Canadian Medical Association's committee on medical aspects of traffic accidents. Discusses the following problems: definition of medical standards for drivers; use of seat belts; psychological studies and driver education; emergency treatment of injured persons; causes of traffic accidents.

02-4030 N

Eiseman, B./Spencer, F. C.

BIBLIOGRAPHY

TRACHEOSTOMY: AN UNDERRATED SURGICAL PROCEDURE.

Kentucky Univ. Medical School, Dept. of Surgery, Lexington. 1 June 1963. 4 p. ref.
American Medical Association. Journal, Vol. 184, No. 9, 1 June 1963, pp. 684-687.

- WSD Surgery, Medical, Methods
- WSBCT Tracheostomy, Maintaining Airways, First Aid
- YER General Discussions, Contents, Study-Report Type
- JNP Consequences/Complications, Injury/Trauma, Accident

Authors list and discuss indications for early tracheostomy. Describe technique, equipment, complications, and postoperative care. Describe the value of the combination of positive pressure mechanical respiration and tracheostomy.

02-4041 N

Hamilton, R. D.
FATAL HEMORRHAGE DURING TRACHEOTOMY: Report of a case and use of Sheldon Tracheotome.
Walter Reed General Hospital, Neurosurgical Service, Washington, D.C. 1 Oct. 1960. 2 p. ref.
American Medical Association. Journal, Vol. 174, No. 5, 1 Oct. 1960, pp. 530-531.

- JNB Fatal, Injury/Trauma, Accident
- WSBCT Tracheostomy, Maintaining Airways, First Aid, Medical, Methods
- JNK Hemorrhage
- YCK Case Study, Nature of Study, Study-Report Type

Author reports on fatality incurred during use of Sheldon tracheotome. Mortality resulted from technical difficulty, but author concludes that it would save more lives than the conventional tracheotome during mass casualty situation.

02-4078 N

Spanknebel, G. L./Kale, P. A.
CARDIOPULMONARY RESUSCITATION AT A COMMUNITY TEACHING HOSPITAL: Report of 37 cases.
Memorial Hospital, Dept. of Medicine, Worcester, Massachusetts. Nov. 1966. 7 p. table. ref.
Maine Medical Association. Journal, Vol. 57, Nov. 1966, pp. 272-277, 281.

- OAK Cardiovascular System, Anatomy/Body, Biomedical Aspect
- OAL Respiratory System
- WSBCR Resuscitation, Maintaining Airways, First Aid, Medical, Methods
- YCK Case Studies, Nature of Study, Study-Report Type
- QD Teaching/Training, Educational Aspect

Authors describe their plan of action in cardiac arrest and the resuscitation equipment used, tabulating 43 episodes with respect to sex, age, diagnosis, cause of arrest, post-arrest stay, deficiencies in treatment and result of treatment. Include some illustrative case histories.

Suggest percutaneous subclavian vein puncture and

insertion of a plastic catheter for immediate delivery of drugs to the heart and body tissues, and lidocaine hydrochloride, a valuable therapeutic adjunct. Discuss the need for some type of internal cardiac pacemaker.

Since program began in 1964, growing individual experience and improvement in resuscitative techniques produced a marked increase in the survival rate.

02-4100 N

MINIMAL EQUIPMENT FOR AMBULANCES.

1967. 4 p. figs.
American College of Surgeons. Bulletin, March-April 1967, pp. 92-96.

- XT Medical, Equipment
- IQ Ambulance, Services
- YEN Standards, Contents, Study-Report Type

Lists and pictures of equipment considered essential for ambulances by the Committee on Trauma. Resuscitation unit, spine boards, universal dressing, suction apparatus are added to previous list; the tourniquet is eliminated. Mode of operation, vacuum obtained, and rate of water flow for various suction units are described.

02-4127 N

Pizzi, W. F.
THE MANAGEMENT OF MULTIPLE INJURY PATIENTS.
Beekman-Downtown Hospital, Dept. of Surgery, New York. 1968. 7 p. figs. ref.
Journal of Trauma, Vol. 8, No. 1, 1968, pp. 91-103.
Conference: American College of Surgeons, New York-Brooklyn Regional Committee on Trauma, 25 March 1967, New York.

- WSE Therapeutic, Medical, Methods
- JNX Multiple Severe Injuries, Injury/Trauma, Accident
- YCK Case Studies, Nature of Study, Study-Report Type

Author describes in general the emergency procedure at Beekman-Downtown Hospital. Describes and discusses ambulance care, standards for ambulance personnel, emergency room care, and role of the consultant. Lists critical, immediate medical problems according to the speciality. Presents a classification system which has been found useful in managing patients.

02-4145 S

Stemmler, E. J.
CARDIAC RESUSCITATION: A 1-year study of patients resuscitated within a university hospital.
Dept. of Medicine, Hospital of the Univ. of Pennsylvania, Philadelphia. Oct. 1965. 4 p. tables. ref.
Annals of Internal Medicine, Vol. 63, No. 4, Oct. 1965, pp. 613-618.
Grant No: HE 5239/HE 06352.
Sponsor: Southeastern Pennsylvania Heart Association/Public Health Service, Bethesda, Maryland.

- OAK Cardiovascular System
- WSBCR Resuscitation
- YEF Data Statistics, Contents, Study-Report Type

Study of 103 patients. Author concludes that survival

may be improved by closer patient observation and by the instruction of nursing personnel in the techniques of external cardiac massage. Notes that the procedure is unobjectionable and technically simple. Presents data which show the relationship between survival and cause of arrest, age, type of rhythm, and severity of illness.

02-4152 N

Dwyer, B.

RESUSCITATION AFTER MULTIPLE INJURIES.

St. Vincent's Hospital, Dept. of Anaesthetics, Sydney (Australia). 7 March 1964. 4 p. ref.

Medical Journal of Australia, Vol. 1, 7 March 1964, pp. 349-352.

Conference: Australian Medical Association, Orthopaedic Surgery and New South Wales Branch, combined meeting, 24 April 1963, Sydney.

JNX Multiple Severe Injuries, Injury/Trauma, Accident
WSBCR Resuscitation, Maintaining Airways, First Aid, Medical, Methods
YER General Discussions, Contents, Study-Report Type

Author reviews the biochemical and physiological changes which follow hemorrhage. Notes that hemorrhagic shock in the young will respond to transfusion of whole blood; this is not necessarily true in elderly patients. Describes and discusses ancillary forms of resuscitation. Discusses complications of rapid massive transfusion. Notes that new techniques are needed for measurement of blood volume in the injured.

02-4170 N

Phillips, P. J.

DISASTER FIRST AID: Part I.

Jan.-Feb. 1968. 7 p. figs.

Police, Vol. 12, No. 3, Jan.-Feb. 1968, pp. 74-80.

WSB First Aid, Medical, Methods
JN Injury/ Trauma, Accident
YER General Discussions, Contents, Study-Report Type

First of a series related primarily to nuclear disaster, designed to supplement elementary first-aid training. Much of the information should be useful in other accident situations.

Author presents classification of casualties with regard to priority of evacuation and treatment. Describes diagnosis and treatment of minor injuries: lacerations; sprains; fractures; dislocations; concussion; burns.

02-4180 N

Gissane, W.

MEDICAL FIRST-AID AT THE ACCIDENT SITE.

Birmingham Accident Hospital (England). Dec. 1964. 4 p. figs.

Philippine Federation of Private Medical Practitioners Journal, Vol. 13, Dec. 1964, pp. 783-788.

JN Injury/ Trauma, Accident
JRGI Professional/ Physician, Treatment/Care, Recovery of Injured
WSB First Aid, Medical, Methods
DEHM Medical Units, Special Purpose, Motor Vehicle, Vehicle

Author describes and discusses treatment of acute conditions demanding immediate medical assistance. Describes a first-aid kit for physicians. Lists minimum equipment.

02-4183 N

COMBAT CASUALTY MANAGEMENT IN VIETNAM.

See 01-4183 N

02-4184 N

Farrington, J. D.

DEATH IN A DITCH.

June 1967. 12 p. fig. photos.

American College of Surgeons Bulletin, Vol. 52, No. 3, May-June 1967, pp. 121-132.

QD Teaching/ Training, Educational Aspect
WSB First Aid, Medical, Methods
XT Medical, Equipment
OAH Neck, Anatomy/ Body, Biomedical Aspect
OANBC Spinal Cord, Central, Nervous System

Minocqua, on Highway 51 in Wisconsin, is a city of 2,000 that grows to 30,000 with the resort activities. Due to poor ambulance services and inadequate training of personnel, Dr. Farrington instructed ambulance operators in rescue techniques. Gives survey in a diagnostic form to be carried out by rescue person, with recommendations for treatment if possible. States that training of rescue workers must go beyond Red Cross, International Rescue or Bureau of Mines training courses. Emphasizes attention to neck and back injuries. Describes use of back boards, equipment for rescue vehicle.

02-4185 S

Pettinari, V./ Dagradi, A.

ORGANIZZAZIONE E SCOPI DEL PRONTO SOCCORSO STRADALE. [ORGANIZATION AND SCOPE OF HIGHWAY FIRST AID].

June 1960. 11 p. figs. map. ref.

Chirurgia italiana, Vol. 12, June 1960, pp. 277-294.

JNB Fatal, Injury/ Trauma, Accident
JNPJ Aspiration/ Dehydration, Consequences/ Complications
JNPL Shock
JNK Hemorrhage
WSB First Aid, Medical, Methods
VN Epidemiology/ Etiology, Disciplines
YEF Data Statistics, Contents, Study-Report Type

Discuss accident statistics and the position of traffic fatalities among other causes of death.

First aid dealt with as a problem of the community authorities. Ambulances stationed at the emergency hospitals, radius of action of about 20 to 30 kilometers.

Describe and analyze injuries: 40% head injuries, 30% joint injuries, 10% thorax, etc. Many multiple injuries.

Stress the fact that with improved first aid combined with better surgical procedures, more lives could be saved (this conclusion drawn from the analysis of fatality causing injuries). Infusions carried out on the scene of the accident, plasma carried on all ambulances.

Authors say that a physician in the ambulance should limit his activity to the reestablishment of airways and of the circulatory system. They favor creation of trauma centers for traffic accident surgery.

BIBLIOGRAPHY

02-4188 N

Kossuth, L. C.
VEHICLE ACCIDENTS: IMMEDIATE CARE TO BACK INJURIES.
Air Force Medical Service School, Gunter AFB, Alabama. 1966. 10 p. photos.
Journal of Trauma, Vol. 6, No. 5, 1966, pp. 582-591.
Conference: American Association for Automotive Medicine, annual, 22 Oct. 1965, Rochester, Minnesota.

OA0BB Vertebrae/ Spine, Bones, Musculo-Skeletal System, Anatomy/ Body, Biomedical Aspect
OANBC Spinal Cord, Central, Nervous System
OAH Neck
XTH Backboards, Medical, Equipment
JR Recovery of Injured, Accident

Author describes use of MSS Winch Board, a seven foot long, waxed board, with a winch at one end. Holes in legs and pins used to adjust height to that of car floor level. Pictures show use of winch board, of chair splint for immobilizing seated patient with vertebral fractures, of head band and blanket roll, and of short board back splint. Patients in various positions are discussed and precautions to be taken are suggested.

02-4191 N

STANDARDS FOR EMERGENCY AMBULANCE SERVICES.
American College of Surgeons, Committee on Trauma, Chicago, Illinois. May-June 1967. 2 p.
American College of Surgeons Bulletin, May-June 1967.

YEN Standards, Contents, Study-Report Type
IQ Ambulance, Services

Authors describe standards for organization and operation, personnel, vehicles, equipment, and communications. Discuss some other factors for which standards do not exist. List sources from which the "model ambulance ordinance" may be obtained.

02-4511 N

Wilder, R. J./ McMahon, M. C.
EMERGENCY SQUAD DOCTOR: A PLAN FOR HANDLING TRAPPED CASUALTIES.
Baltimore City Hospitals, Maryland/ Baltimore City Fire Dept., Maryland. Feb. 1963. 2 p.
Maryland State Medical Journal, Vol. 12, Feb. 1963, pp. 57-58.

DEHM Medical Units, Special Purpose, Motor Vehicles, Vehicle
WS Medical, Methods
WSD Surgery
JRGI Professional/ Physician, Treatment/ Care, Recovery of Injured, Accident

Authors describe, in general, the methods, personnel, and equipment used in an emergency plan.

02-4512 N

ERFAHRUNGEN MIT DEM NOTFALLARTZWAGEN DER CHIRURGISCHEN UNIVERSITÄTSKLINIK KÖLN. [EXPERIENCES WITH THE MOBILE UNIT OF THE SURGICAL UNIVERSITY CLINIC IN COLOGNE.]
See 03-4512 N

02-4523 N

Speier, F.
BEITRAG ZUR SCHOCKBEKÄMPFUNG AUF DER AUTOBAHN. [CONTRIBUTION TO THE THERAPY OF SHOCK ON THE HIGHWAY.]
1957. 2 p.
Münchener Medizinische Wochenschrift, Vol. 99, 1957, pp. 1459-1460.

WSB First Aid, Medical, Methods
JRGI Professional/ Physician, Treatment/ Care, Recovery of Injured, Accident
XT Medical, Equipment

Author describes instance where he could save a life on the scene of an accident. Ambulance arrived 20 minutes after author (M.D.) started i.v. A new infusion method is reported.

Contribution to the therapy of shock on the highway.

02-4524 N

Ungeheuer, E./ Contzen, H.
BESTECK FÜR LEBENSRETTENDE MASSNAHMEN AM UNFALLORT "ARZT-KOFFER." [THE PHYSICIAN'S KIT FOR LIFE-SAVING MEASURES AT THE SCENE OF THE ACCIDENT].
Frankfurt Univ., Surgery Dept. (Germany). 1963. 5 p. figs.
Münchener Medizinische Wochenschrift, Vol. 105, 5 April 1963, pp. 709-711.

XT Medical, Equipment
JRGI Professional/ Physician, Treatment/ Care, Recovery of Injured, Accident
JN Injury/ Trauma
WSBCR Resuscitation, Maintaining Airways, First Aid, Medical, Methods

Without the necessary instruments and drugs the physician can hardly be more effective than the medical layman trained in first aid when he is called to prevent or deal with life-threatening situations at the scene of the accident or on the way to a hospital. A few simple and suitable instruments and tools, however, will enable him to perform the most decisive emergency treatment. The "Doctor's Box" was developed and demonstrated for first-aid emergency treatment at the scene of the accident. It contains all necessary instruments and drugs and can be used by any physician without any special training or experience.

02-4530 N

Zhukov, B. P.
TRACHEAL INTUBATION IN FIRST AND EMERGENCY AID.
Donets Medical Institute, Bogoslavskii Surgical Clinic (Russia). 1961. 9 p. table. ref.
Sovetskana Meditsina, Vol. 25, Dec. 1961, pp. 114-117.
Order No: STS 6328 (English translation).

WSBC Maintaining Airways, First Aid, Medical, Methods
JRGI Professional/ Physician, Treatment/ Care, Recovery of Injured, Accident

Author recommends intubation and subsequent assisted ventilation as an effective first aid procedure. Describes clinical experience (methods, indications, results) in an emergency ward situation. Three illustrative case reports.

03-3700 N

CHIRURGISCHE PROBLEME DER STRASSEN VERKEHRsunFÄLLE UND IHRE BEDEUTUNG FÜR DIE ALLGEMEINHEIT. [SURGICAL PROBLEMS OF TRAFFIC ACCIDENTS AND THEIR SIGNIFICANCE FOR THE GENERAL PUBLIC.] See 02-3700 N

03-3704 N

Becker, T./ Hartmann, G.
SITZUNGSBERICHTE AUS CHIRURGISCHEN GESELLSCHAFTEN; MEDIZINISCH WISSENSCHAFTLICHE GESELLSCHAFT FÜR CHIRURGIE AN DER UNIVERSITÄT JENA. [PROCEEDINGS OF THE SYMPOSIUM OF ASSOCIATION OF SURGEONS OF UNIVERSITY OF JENA.]
Universitätsklinik Jena (Germany). 1963. 3 p.
Zentralblatt für Chirurgie, Vol. 88, 1963, pp. 1382-1387 (Résumé).

YEB Proceedings, Contents, Study-Report Type
YED Abstracts
DEH Special Purpose, Motor Vehicles, Vehicle
JN Injury/Trauma, Accident
OAI Head, Anatomy/Body, Biomedical Aspect
OAF Thorax
JNPI Fat Embolism, Consequences

Proceedings of the conference presented in summary form. (1) Reference made by Lembke in Magdeburg about experiences on 2,500 calls to the scene of an accident. In this sample, Lembke only had one death during transportation. (2) Kothe discusses injuries to esophagus in chest trauma. (3) Bellmann (Dresden) discusses advisability of a mobile unit in Dresden. Author is in favor of such a measure complemented by better training of ambulance personnel and mandatory availability of first-aid kit in each physician's (good samaritan) car. (4) Ziegler in Kirchberg analyzes Emergency Department data and the geographical location of the hospital. Improved first-aid training of police officers recommended. One common telephone number for emergency throughout the nation is suggested. Improved radio communications mentioned. (5) Haase in Templin discussed insurance problems. (6) Hartmann (from Jena) discussed organization of emergency hospital and mobile unit in Moscow. The Sklifosowsky Institute has about 120-140 admissions (Emergency Room). 80% of blood transfusions are with blood obtained from cadavers. Advantage: when a victim needs large quantities of blood, they can possibly be provided from one donor only. (7) Usbeck (Erfurt). First therapy with head injuries. Advises further research by physicians on scene and during transportation. (8) Schumann (Dresden). Therapy of skull-brain injuries. Emphasis on treatment for shock, maintenance of airways, tracheostomy. Attention necessary to danger of hyperthermia. (9) Hollwich (Jena). First aid to eye injuries. (10) Rose (Magdeburg). Head injury as seen by physician at site of accident. (11) Bummer (Zurich). First aid at scene with thorax injuries. Flail chest, hemothorax, pneumothorax and cardiopulmonary resuscitation in cases of electrocution are discussed. (12) Noller (Gera). Fat embolism. Agenda of conferences are interesting, and such discussions (and/or data provided by research-physicians) will certainly clarify some of the doubts and questions about a probabilistic model for emergency medical care.

03-3714 S

Bauer, K. H.
ERSTE HILFE AM UNFALLORT UND ERSTVERSORGUNG VERKEHRsunVERLETZTER NACH KLINIKKAUFNAHME. [FIRST AID AT SCENE OF ACCIDENT AND FIRST THERAPY AFTER ADMISSION TO EMERGENCY ROOM.]
1960. 6 p.
Hefte zur Unfallheilkunde, Vol. 62, 1960, pp. 89-99.

YEF Data Statistics, Contents, Study-Report Type
DE Motor Vehicles, Vehicle
J Accident
JRG Treatment/Care, Recovery of Injured
YCK Case Studies, Nature of Study

Experiences in German cities with first aid at the scene of an accident, by physicians with an adequately equipped mobile unit, are discussed. Etiology of trauma in Germany is described, with high frequency of traffic accidents. Types of injuries are discussed in correlation with specific type of vehicle or accident. Case studies of mobile unit action are given.

Reference is made to correlation between total number of fatalities and changes in legislation of speed limits.

Emphasis on special training for trauma of all surgeons involved in emergency medical care.

03-3715 S

Wassner, U. J./ Ecke, H.
MÖGLICHKEITEN EINER INTENSIVIERUNG DER ERSTEN HILFE FÜR UNFALLVERLETZTE IN STÄDTEN MIT LÄNDLICHER UMGEBUNG. [POSSIBILITIES FOR INTENSIFYING FIRST AID FOR ACCIDENTS IN CITIES WITH A RURAL ENVIRONMENT.]
Chirurgischen Universitätsklinik Giessen (Germany). Jan. 1964. 7 p. tables. ref.
Monatsschrift fuer Unfallheilkunde Versicherungs-, Versorgungs- und Verkehrsmedizin, Vol. 67, Jan. 1964, pp. 32-44.

YCF Systems Study, Nature of Study, Study-Report Type
YEF Data Statistics, Contents, Study-Report Type
L Time
KBK Rural, Terrain/Habitat, Space
KBM Urban/Town/City
WSI Autopsy, Medical, Methods
DEHM Medical Unit, Special Purpose, Motor Vehicles, Vehicle

Author carried out a methodical analysis to evaluate the possibility of reducing fatalities by means of a physician on the scene of an accident.

Accident data and fatality data are plotted in and around Giessen, to correlate frequencies of fatalities with distance to hospital. Etiology of trauma and time from accident to death are tabulated. Causes of death are studied in each group of fatalities (grouped by total time from accident to death). Secondary findings and concurrent causes of death are recorded.

Frequency of medical aid measures that could have prevented death is given. Maintaining airways and starting an infusion are the most common ones.

03-3740 S

KOMPLIKATIONEN NACH SCHWEREM GEDECKTEM

BIBLIOGRAPHY

SCHÄDELHIRNTRAUMA IM KLINISCHEN UND MORPHOLOGISCHEN BEFUND. [CLINICAL AND MORPHOLOGICAL FINDINGS IN COMPLICATIONS FOLLOWING SEVERE CLOSED CEREBROCRANIAL TRAUMA.] See 02-3740 S

03-3743 S

Röse, W.
DER SCHÄDELVERLETZTE AUS DER SICHT DES ARZTES AM UNFALLORT. [SKULL INJURIES AS SEEN BY THE PHYSICIAN AT THE SITE OF THE ACCIDENT.]

Chirurgischen Klinik der Medizinischen Akademie Magdeburg (Germany). Feb. 1964. 3 p. ref. figs.
Chirurg, Vol. 35, Feb. 1964, pp. 54-56.

OANBB Brain, Central, Nervous System, Anatomy/Body
OAI Head
DEHM Medical Unit, Special Purpose, Motor Vehicles, Vehicle
YCK Case Studies, Nature of Study, Study-Report Type

Aspiration, shock and hemorrhage are discussed. Brief presentation of etiology of trauma, and of on-the-scene experience of other German physicians. Case material is discussed. Of 2393 ambulance runs carried out in three years by the Surgical Clinic of the Medical School in Magdeburg, 511 had head injuries. The severity of head, skull and brain injuries and measures required on the scene to assure transportability are discussed. Some recommendations about therapy.

03-3744 S

Röse, W.
DAS SCHICKSAL DES AM UNFALLORT ÄRZTLICH VERSORGTEN SHÄDELHIRNVERLETZTEN. [THE OUTCOME OF THE CEREBROCRANIAL INJURY GIVEN MEDICAL CARE AT THE ACCIDENT SITE.]

14 March 1964. 5 p. tables. ref.
Zentralblatt fuer Chirurgie, Vol. 89, 14 March 1964, pp. 369-376.

DEHM Medical Unit, Special Purpose, Motor Vehicles, Vehicle
JRGI Professional/Physician, Treatment/Care, Recovery of Injured, Accident
YEF Data Statistics, Contents, Study-Report Type
JNF Concussion, Injury/Trauma
JNH Fracture
OAIA Skull, Head, Anatomy/Body, Biomedical Aspect
OANBB Brain, Central, Nervous System
WSI Autopsy, Medical, Methods
L Time

Author discusses etiology of head trauma. Findings of complications of head injuries on the scene and during transportation are discussed as a result of the experience of author who in about 3 years went on 2,393 ambulance runs, of which 511 were for head injuries.

Number of severe head injuries, and number of fatals before arrival of physician, are given. Claims no fatalities during transportation. Etiology of trauma, description of accident, and description of specific type of head injury are tabulated. Autopsy results show pulmonary complications, as tabulated for 10 cases.

Length of period of unconsciousness is discussed. Author claims to have reduced number of severe states of shock, and of pulmonary complications. Mortality rate 30%.

03-3754 S

ERSTE BEHANDLUNG DER VERLETZUNGSFOLGEN BEI STRASSENVERKEHRsunFÄLLEN. [FIRST TREATMENT OF THE COMPLICATIONS OF INJURY WITH TRAFFIC ACCIDENT.] See 23-3754 S

03-3815 N

Collins, J.
ORGANIZATION AND FUNCTION OF AN ACCIDENT FLYING SQUAD.
3 Sept. 1966. 3 p.
British Medical Journal, 3 Sept. 1966, pp. 578-580.

JRGI Professional/Physician, Treatment/Care, Recovery of Injured, Accident
WSBCR Resuscitation, Maintaining Airways, First Aid, Medical, Methods
WSD Surgery
XT Medical, Equipment

Organization and objectives of accident flying squad started in Derby, England in 1955 are described. Accident has been mainly on industrial injuries. Staffing of squad, method of call, a major accident plan, and communications are described. The maximum number of eighteen calls per year is relatively low.

03-3820 N

RECUSCITATION - 1966: An answer to the age-old problems of postponing death in a cardiac or pulmonary emergency takes form in a newly-designed 'mobile unit'.
See 02-3820 N

03-3900 N

Milner, B.
FLYING SQUAD.
Royal Alexandra Hospital for Sick Children, Brighton (England). 25 Sept. 1964. 4 p. photos.
Nursing Times, Vol. 60, 25 Sept. 1964, pp. 1251-1254.

EC Children, People
X Equipment
DEHL Ambulance, Special Purpose, Motor Vehicles, Vehicle
JRGI Professional/Physician, Treatment/Care, Recovery of Injured, Accident

Describes special ambulance team and equipment whose sole purpose is to provide emergency care to sick babies. Portable Oxygenaire incubator is the main feature of equipment; trained infant's-ward staff nurses go on all calls. 73 infants were transported in 1962, and 88 in 1963.

03-3961 S

Friedhoff, E./Lehmann, H. D.
ERFAHRUNGEN ÜBER ERSTE ÄRZTLICHE HILFE AM UNFALLORT UND AUF DEM TRANSPORT BEI

SCHWERVERLETZTEN UND LEBENSBEDROHTEN. [EXPERIENCE ABOUT MEDICAL AID AT THE SCENE OF AN ACCIDENT AND DURING TRANSPORT WITH SEVERELY INJURED PATIENT.]

1960. 8 p. figs. tables.

Hefte zur Unfallheilkunde, Vol. 62, 1960, pp. 111-124.

YEF Data Statistics, Contents, Study-Report Type
JRGI Professional/Physician, Treatment/Care, Recovery of Injured, Accident
DEH Special Purpose, Motor Vehicles, Vehicle
WSD Surgery, Medical, Methods
YER General Discussions, Contents, Study-Report Type

Authors describe mobile unit as it is used in the city of Cologne. Tabulate etiology of trauma by number of calls, people involved, fatalities before arrival of the unit, deceased in the mobile unit, and transported by other means.

Stress promoting transportability of patient as main objective of medical team. Therapeutic measures for the respiratory system, circulatory system, pain relief, and others are indicated by frequencies for each type of trauma. The difference between urban and rural conditions is discussed. A discussion by conference participants follows.

03-3962 N
DIE ERSTVERSORGUNG AM UNFALLORT. [FIRST TREATMENT AT THE SCENE OF AN ACCIDENT.]
See 04-3962 N

03-3964 N
ZUR ERSTVERSORGUNG SCHWERSTER SCHÄDELHIRNTRAUMEN. [ON FIRST AID IN VERY SEVERE CRANIOCEREBRAL TRAUMAS.] See 11-3964 N

03-3977 N
HUBSCHRAUBERTRANSPORT VON SCHWERVERLETZTEN - ÄRZTLICHE AUFGABE UND ERFAHRUNGEN. [TRANSPORT BY HELICOPTER OF SEVERELY INJURED - MEDICAL FUNCTION AND EXPERIENCE.] See 04-3977 N

03-3978 S
Mahler, W.
DER OPERATIONSWAGEN DER CHIRURGISCHEN UNIVERSITÄTSKLINIK HEIDELBERG. [THE MOBILE OPERATION ROOM OF THE CHIRURGISCHE UNIVERSITÄTSKLINIK HEIDELBERG.]
Chirurgischen Universitätsklinik Heidelberg (Germany).
Sept. 1960. 5 p. photos. table. ref.
Chirurg, Vol. 31, Sept. 1960, pp. 421-425.

WSD Surgery, Medical, Methods
DEH Special Purpose, Motor Vehicles, Vehicle
IO Hospitals, Services
YCK Case Studies, Nature of Study, Study-Report Type
YEF Data Statistics, Contents, Study-Report Type

Author stresses that mere transportation of accident victims is dangerous for cases with severe bleeding, shock, multiple fractures, and a large number of those with brain

injuries. The surgery clinic of the Heidelberg University has a staff of about 60 doctors and 140 nurses, out of which a surgical team is scheduled to be available around the clock to go out to the scene of serious accidents. The surgical-bus is described. On every call one surgeon, two assistant surgeons, one anesthesiologist, a surgery nurse, and an aide make up the team. The major objective is not to provide major surgery on the scene of an accident but to achieve "transportability" of the victim. After the victim has been stabilized, the transportation is provided by regular ambulances of the German Red Cross.

Some case reports are given. Frequency of various kinds of injury are shown. On 20% of the calls author claims that life-saving measures by surgical team were indispensable for the survival of victim.

03-3979 S
Kootz, F./Friedhoff, E.
NARKOSE UND INTUBATION AM UNFALLORT UND AUF DEM TRANSPORT IN DAS KRANKENHAUS. [ANESTHESIA AND INTUBATION AT THE SITE OF ACCIDENT AND TRANSPORTATION TO THE HOSPITAL.]
Chirurgische Universitätsklinik Köln (Germany). Aug. 1960. 6 p. figs. tables. ref.
Anaesthetist, Vol. 9, Aug. 1960, pp. 256-261.

JRGI Professional/Physician, Treatment/Care, Recovery of Injured, Accident
WSBC Maintaining Airways, First Aid, Medical, Methods
WSF Anesthesia
DEH Special Purpose, Motor Vehicles, Vehicle
YEF Data Statistics, Contents, Study-Report Type

The Cologne mobile unit is described. Number of cases requiring anesthesia (general) is given for the various categories of accident victims, with respective results. Endotracheal intubation at the scene of an accident is mentioned as a very important life-saving measure. Frequency and results of intubation are given. Sixteen cases of anesthesia are discussed, with description of the accident, the type of injury, the indications for and type of anesthesia, and the results.

03-3980 S
Nachtrab, H./Buchholz, H. W.
ÄRZTLICHE HILFE AM UNFALLORT: Erfahrungen eines Versuches in Hamburg. [MEDICAL AID ON THE SITE OF ACCIDENT: Experiences with an experiment in Hamburg.]
Feb. 1966. 5 p. table. ref.
Monatsschrift für Unfallheilkunde, Versicherungs-, Versorgungs- und Verkehrsmedizin, Vol. 69, Feb. 1966, pp. 49-57.

JRGI Professional/Physician, Treatment/Care, Recovery of Injured, Accident
YEF Data Statistics, Contents, Study-Report Type
YCK Case Studies, Nature of Study
WSE Therapeutic, Medical, Methods

A total of 1470 calls were made, over a period of seven months, to a special "physician-ambulance" in Hamburg.

Over one-third were dry runs. Types of medical emergencies are tabulated, and the corresponding injuries are discussed. Only 48 cases were severely ill or injured. In

BIBLIOGRAPHY

28 cases the presence of the physician at the scene was definitely required.

03-3981 S

Liebenow, H. C.

ÄRZTLICHE ERSTE HILFE AM UNFALLORT IN EINER MITTELSTADT. [MEDICAL FIRST AID AT THE SITE OF AN ACCIDENT IN A MEDIUM SIZE TOWN.]

Chirurgischen Klinik des Bezirkskrankenhauses Brandenburg (Havel) (Germany). 5 Aug. 1965. 3 p. ref.

Deutsche Gesundh., Vol. 20, 5 Aug. 1965, pp. 1416-1418.

JRGI Professional/Physician, Treatment/Care, Recovery of Injured, Accident

KBM Urban/Town/City, Terrain/Habitat, Space

X Equipment

Liebenow's "physician team at the scene" carried out 100 runs in 16 months (1963-64).

Author discusses organizational aspects and describes equipment. In Brandenburg-Havel, a city of about 90,000 inhabitants, work of "physician team" is in conjunction with firemen. Of 100 runs there were 34 in which there were either no injured people at all, the injured had already been transported by other means or the accident caused instantaneous death on the scene. Forty-one of the remaining cases are called justified; i.e., such that there was the requirement for a physician at the scene and during transportation.

Round trip runs varied from six to 30 miles.

03-3982 S

Koslowski, L.

ERSTE HILFE AM UNFALLORT UNTER EINSCHLUSS DER FEHLER UND GEFAHREN. [FIRST AID AT THE ACCIDENT SITE WITH REFERENCE TO ERRORS AND DANGERS.]

1965. 3 p. tables.

Hefte zur Unfallheilkunde, Vol. 81, 1965, pp. 220-225.

JRGI Professional/Physician, Treatment/Care, Recovery of Injured, Accident

DEH Special Purpose, Motor Vehicles, Vehicle

X Equipment

Of 5,900 cases of skull-brain injury brought to the Freiburg Surgical Clinic from 1950 to 1965, about 45% were seen and treated at the scene by a physician. Author gives priority of action required by laymen and physician at the scene of accident.

Importance of good communication emphasized. Insists on value of laymen's assistance and therefore, general education for first aid.

03-3983 S

Reichmann, W./Wellmer, H. K.

ERFAHRUNGEN MIT DEM KÖLNER NOTFALLARZT-WAGEN AUS UNFALLCHIRURGISCHER SICHT. [EXPERIENCES WITH THE COLOGNE EMERGENCY AMBULANCE FROM THE VIEWPOINT OF ACCIDENT SURGERY.]

1964. 2 p. table. figs.

Hefte zur Unfallheilkunde, Vol. 78, 1964, pp. 206-208.

DEH Special Purpose, Motor Vehicles, Vehicle

X Equipment

VN Epidemiology/Etiology, Disciplines

JRGI Professional/Physician, Treatment/Care, Recovery of Injured, Accident

WSE Therapeutic, Medical, Methods

Authors summarize continued experience with surgical van in Cologne. About one in every few ambulance calls required trauma team attention on the scene. In three years (1960-62) in a total of 8,950 ambulance calls, 774 surgical-van runs were carried out. Of these 774, a total of 310 are called fully justified.

Reasons for inefficiency in system (60% of calls did not need physician) are the inadequate assessment of severity of injury by lay people, and the unwillingness to risk a loss in time to allow for more skilled people to arrive at the scene, assess criticality and then call the surgical van and trauma team.

Of 310 runs, 187 were properly stabilized and taken to hospital alive and in improved conditions. 50% of the latter had head injuries. Tracheostomy a very frequent procedure.

03-3984 S

ÄRZTLICHE AUFGABEN BEIM TRANSPORT VON SCHWERVERLETZTEN MIT HUBSCHRAUBERN. [TASKS OF THE PHYSICIAN IN THE TRANSPORTATION OF SERIOUSLY INJURED PERSONS BY HELICOPTER.] See 04-3984 S

03-3993 N

Hackethal, K. H.

DIE ERSTVERSORGUNG DES VERLETZTEN AM UNFALLORT. [FIRST MANAGEMENT OF THE INJURED AT THE SITE OF THE ACCIDENT.]

Erlangen Universität, Chirurgischen Klinik (Germany). 22 Feb. 1963. 6 p. tables. figs.

Medizinische Klinik, Vol. 58, 22 Feb. 1963, pp. 283-288.

JRGI Professional/Physician, Treatment/Care, Recovery of Injured, Accident

WSB First Aid, Medical, Methods

JN Injury/Trauma

WSBC Maintaining Airways

JNN Asphyxia/Suffocation

JRH Transportation, Recovery of Injured, Accident

Author discusses in detail resuscitation, effective pain relief, preparation for transportation, adequate positioning, clear directions for transportation. Special attention given to whip-lash victims and corresponding care.

03-4018 N

SOME PROBLEMS ENCOUNTERED IN THE AERIAL TRANSPORTATION OF PATIENTS TO HOSPITAL. See 04-4018 N

03-4090 S

Friedhoff, E./Hoffmann, V.

ÄRZTLICHE VERSORGUNG SCHWERVERLETZTER AM UNFALLORT UND AUF DEM TRANSPORT. [TREATMENT BY PHYSICIAN OF THE SEVERELY INJURED, AT THE SCENE OF THE ACCIDENT AND DURING TRANSPORTATION.]

BIBLIOGRAPHY

1959. 8 p. figs. tables.
Münchener Medizinische Wochenschrift, Vol. 101, 1959,
pp. 1430-1437.

- JRGI Physician, Treatment/Care, Recovery of Injured, Accident
- JNX Multiple Severe Injuries, Injury/Trauma
- DEHM Medical Units, Special Purpose, Motor Vehicles, Vehicle
- YEF Data Statistics, Contents, Study-Report Type
- YCK Case Studies, Nature of Study
- WSD Surgery, Medical, Methods
- NKF Frequency/Time, Operating Conditions, Physical Aspect

Authors describe most frequent causes of death on the scene of an accident and during transportation, and a mobile unit containing a small surgery room for more efficient treatment of the severely injured. 579 calls, involving 702 injured persons, during a period of about two years, are described listing in detail the following: etiology of trauma, number of deaths, number of deaths before arrival of the physician on the scene, distribution of injuries by body area, frequencies by hour of day, day of week, month of year, medical therapy provided at scene and during transportation. Intubation is considered superior to tracheostomy. Frequency of I.V.'s and aspiration (suction) to maintain airways is high. Five case reports are mentioned to demonstrate need for physician at scene.

03-4173 N
L'IMPIEGO DELL'ELICOTTERO QUALE MEZZO DI PRIMO SOCCORSO DURANTE LE OPERAZIONI DI SGOMBERO E DI TRASPORTO SANITARIO. [THE USE OF THE HELICOPTER AS A MEANS OF FIRST AID DURING OPERATIONS OF MEDICAL EVACUATION AND TRANSPORT.] See 04-4173 N

03-4185 S
ORGANIZZAZIONE E SCOPI DEL PRONTO SOCCORSO STRADALE. [ORGANIZATION AND SCOPE OF HIGHWAY FIRST AID.] See 02-4185 S

03-4337 S
Gogler, E.
ROAD ACCIDENTS.
Heidelberg Univ., Surgical Clinic (Germany). 1965. 176 p. photos. tables. figs.
Series chirurgica Geigy, No. 5, 1962.
Source: Geigy Ltd., Pharmaceuticals Div., Manchester (England).

- JA Preventive Measures, Accident
- JL Accident Investigation
- JN Injury
- JD Collision
- DHC Chassis, Vehicle Parts, Vehicle
- DMD Restraint Systems, Auxiliaries/Accessories
- DHD Body (Upper)
- JRG Treatment/Care, Injury/Trauma
- YER General Discussions, Contents, Program-Report Type
- YEI Photographs/Illustrations

Author discusses etiology of trauma, epidemiologic aspects, injury patterns, causes of death. Case histories

documented with photos provide coverage of majority of injuries presented. First aid, emergency treatment at hospital, and surgery are discussed and documented. Bibliography, with 765 references, covers many aspects of accident causation, modes of injury, therapy, rehabilitation.

03-4505 N
AMBULANCE BRINGS OPERATING ROOM TO JAPANESE TRAFFIC ACCIDENT VICTIMS.
16 Sept. 1966. 2 p. photos.
Medical World News, Vol. 16, 16 Sept. 1966, pp. 44-45.

- DEHM Ambulance, Medical Units, Special Purpose, Motor Vehicles, Vehicle
- JRGI Professional/Physician, Treatment/Care, Recovery of Injured, Accident
- WS Medical, Methods

Article presents labeled illustration of ambulance. Brief description of its use.

03-4511 N
EMERGENCY SQUAD DOCTOR: A plan for handling trapped casualties. See 02-4511 N

03-4512 N
Friedhoff, E.
ERFAHRUNGEN MIT DEM NOTFALLARZTWAGEN DER CHIRURGISCHEN UNIVERSITÄTSKLINIK KÖLN. [EXPERIENCES WITH THE MOBILE UNIT OF THE SURGICAL UNIVERSITY CLINIC IN COLOGNE]. Cologne Univ., Surgery Dept. (Germany). 1960. 4 p. table.
Landarzt, Vol. 36, 1960, pp. 663-667.

- DEHM Medical Units, Special Purpose, Motor Vehicles, Vehicle
- WS Medical, Methods
- WSD Surgery
- JRGI Professional/Physician, Treatment/Care, Recovery of Injured, Accident
- WSE Therapeutic
- VN Epidemiology/Etiology, Disciplines

Author discusses statistics of traffic accidents and need for improved emergency medical care. Describes surgical mobile unit on 2.5 ton truck chassis designed and built by Ford-Cologne for the Cologne University Clinics. Describes number of calls, persons attended, epidemiology of trauma and frequencies of various therapies as provided by trauma surgeon at the site of the accident. Emphasis on treatment for traumatic shock. High number of I.V. fluids applications, airways problems, intravenous shots for pain relief, shots in general for the circulatory system, and splinting. Three case reports.

03-4523 N
BEITRAG ZUR SCHOCKBEKÄMPFUNG AUF DER AUTOBAHN. [CONTRIBUTION TO THE THERAPY OF SHOCK ON THE HIGHWAY.] See 02-4523 N

03-4525 N
Hashimoto, Y./ Sakakibara, K.
MOBILE OPERATING ROOM AND EMERGENCY TREATMENT VEHICLE.

BIBLIOGRAPHY

20 Aug. 1965. 14 p. figs.

Clinical Surgery, Vol. 20, No. 8, 20 Aug. 1965.

Order No: STS 6059 (English translation).

DEHM Medical Units, Special Purpose, Motor Vehicles, Vehicle
JRGI Professional/ Physician, Treatment/ Care, Recovery of Injured, Accident
JNX Multiple Severe Injuries, Injury/ Trauma
WSI Autopsy/ Pathology, Medical, Methods
XT Medical, Equipment

Describes mobile surgery room of the Tokai Accident Control Center, affiliated with surgical section of Medical School, Nagoya University. TACC has radio communications, telemetry, three mobile operating rooms, fourteen ambulances, ten patrol cars, and two equipment transporting vehicles. Stresses accident frequency; need for prompt and adequate first aid. Dimensional description and equipment. Includes sketches, views, photographs.

03-4531 N

An outline of the mobile operating room, "Toyota-Go." Tokai Traffic Accident Control Center (Japan). n.d. 15 p. photos.

Order No: STS 6060 (English translation).

DEHM Medical Unit, Special Purpose, Motor Vehicles, Vehicle
JRGI Professional/Physician, Treatment/Care, Recovery of Injured, Accident
JNX Multiple Severe Injuries, Injury/Trauma
WSI Autopsy/Pathology, Medical, Methods
XT Medical, Equipment

Describes communication systems for the TACC. Gives dimensional description and lists equipment of the bus-surgery room: operating equipment, defibrillator, skull surgical equipment, U.S. diagnosis systems, Byrd's respirator, iron lung, surgical cabinet with instrument sets for brain, chest, abdominal, and vascular surgery and tracheotomy, scrubbing equipment, sterilizing lamp, refrigerator, telemetry equipment, air conditioning generator.

03-4539 S

Junghanns, H.

BERICHT ÜBER EIN CLINOMOBIL. [REPORT ON A CLINOMOBILE.]

1964. 3 p. tables. figs.

Monatsschrift für Unfallheilkunde Versicherungs-, Versorgungs-, und Verkehrsmedizin, Vol. 78, 1964, pp. 202-206.

JN Injury/Trauma, Accident
DEHM Medical Units, Special Purpose, Motor Vehicles, Vehicle
JRGI Professional/ Physician, Treatment/ Care, Recovery of Injured
YEF Data Statistics, Contents, Program-Report Type

Report on the mobile unit of a workman's compensation hospital in Frankfurt, Germany. Author discusses organization of first aid at the scene: cooperation with police, geographical range, staff. Emphasis on first aid at the scene and reasonable transportation.

04-3762 N

DRINGLICHKEIT DER VERSORGUNG BEI UNFALLVERLETZTEN. [URGENCY OF ACCIDENT INJURY CARE.] See 02-3762 N

04-3962 N

Gögler, E.

DIE ERSTVERSORGUNG AM UNFALLORT. [FIRST TREATMENT AT THE SCENE OF AN ACCIDENT.]

Chirurgischen Universitätsklinik Heidelberg (Germany). April 1964. 5 p. ref.

Regensburger Jahrbuch für Ärztliche Fortbildung, Vol. 12, April 1964, pp. 15-21.

JRGI Professional/Physician, Treatment/Care, Recovery of Injured, Accident
DEH Special Purpose, Motor Vehicle, Vehicle
WSC Diagnosis, Medical, Methods
WSE Therapeutic

Author points out need to prepare victim for transportation; discusses difficulty of diagnosis in many cases, and use of the helicopter. Describes "physicians' kit" for emergencies. Extensive bibliography.

04-3977 N

Scholler, K. L./ Weller, S.

HUBSCHRAUBERTRANSPORT VON SCHWERVERLETZTEN - ÄRZTLICHE AUFGABE UND ERFAHRUNGEN. [TRANSPORT BY HELICOPTER OF SEVERELY INJURED - MEDICAL FUNCTION AND EXPERIENCE.]

May 1965. 3 p. figs. tables. ref.

Therapiewoche. Karlsruhe, Vol. 15, May 1965. pp. 459-462.

DDCD Helicopters, Airborne, Power Vehicle, Vehicle
JNX Multiple Severe Injuries, Injury/Trauma, Accident
JRGI Professional/Physician, Treatment/Care, Recovery of Injured

Authors discuss their experience with helicopters. Two types of utilization: patient transfer and first aid on accident scene. Helicopters in Germany can be requested from the army. Discuss machines currently available in Germany, advantages and disadvantages of the types. List number of cases and types of patients transferred, equipment carried on helicopter. Accompanying physician usually an anesthesiologist.

04-3984 S

Scholler, K. L./ Weller, S.

ÄRZTLICHE AUFGABEN BEIM TRANSPORT VON SCHWERVERLETZTEN MIT HUBSCHRAUBERN. [TASKS OF THE PHYSICIAN IN THE TRANSPORTATION OF SERIOUSLY INJURED PERSONS BY HELICOPTER.]

Chirurgischen Universitätsklinik Freiburg (Germany). 19 Feb. 1965. 3 p. table. fig.

Deutsche Medizinische Wochenschrift, Vol. 90, 19 Feb. 1965, pp. 344-346.

DDCD Helicopters, Airborne, Power Vehicle, Vehicle
JRGI Physician, Treatment/Care, Recovery of Injured, Accident
JNP Consequences/Complications, Injury/Trauma

BIBLIOGRAPHY

OAL Respiratory System, Anatomy/Body, Bio-medical Aspect

Authors describe their experience with patient transfers in helicopter. All of them were cases of spinal cord injury. Age of patient, type of injury, number of days between accident and transfer, position of patient, tracheostomy and/or oxygen and type of helicopter are tabulated. Patients usually accompanied by anesthesiologist.

04-4018 N

O'Leary, T. J.
SOME PROBLEMS ENCOUNTERED IN THE AERIAL TRANSPORTATION OF PATIENTS TO HOSPITAL.
Australian Royal Flying Doctor Service. Sept. 1961. 4 p. *Medical Journal of Australia*, Vol. 48, No. 2, Sept. 1961, pp. 526-529.
Conference: John Alexander Cameron Memorial Lecture, 15 July 1960, Ipswich, Australia.

DDC Airborne, Power Vehicle, Vehicle
JRH Transportation, Recovery of Injured, Accident
JN Injury/Trauma
YER General Discussions, Contents, Study-Report Type

Author describes purpose and history of the Flying Doctor Service, discusses medical personnel and method of financing, and recounts a number of difficult transport problems.

04-4021 N

MEDICAL CRITERIA FOR PASSENGER FLYING.
Aerospace Medical Association, Committee on Medical Criteria. May 1961. 8 p. tables. ref.
Aerospace Medicine, Vol. 32, No. 5, May 1961, pp. 369-382.

JRGI Professional/Physician, Treatment/Care, Recovery of Injured, Accident
DDC Airborne, Power Vehicle, Vehicle
YER General Discussions, Contents, Study-Report Type

Author discusses factors which should be considered when establishing such criteria. Lists and describes the physiologic changes associated with flight. Lists and discusses common medical problems which may or may not require special precautions.

04-4093 N

Waters, J. M., Jr.
HELICOPTERS IN CIVIL MEDICAL EVACUATIONS.
National Highway Safety Bureau, Div. of Emergency Treatment and Transfer of the Injured, Washington, D.C. 1967 approx. 13 p.

DDCD Helicopters, Airborne, Power Vehicle, Vehicle
JN Injury/Trauma, Accident
JRH Transportation, Recovery of Injured

Author reviews use of helicopters by the military and indicates potential for such use in highway accidents. Suggests possible sources of helicopters for use in civil emergencies. Discusses practical and economic factors.

04-4095 N

MEDICINE IN SOUTH VIETNAM TODAY. PART 5: VUNG TAU-AUSTRALIAN TROOPS, AMERICAN HELICOPTERS AND SYDNEY DOCTORS. See 01-4095 N

04-4110 N

Myers, R. N./ Angelides, A. P./ Haupt, G. J.
A CIVILIAN AEROMEDICAL LIFESAVING PLAN, HELP.
Lankenau Hospital, Dept. of Surgery/ Lankenau Hospital, Dept. of Medicine, Pennsylvania. Oct. 1965. 3 p. ref. photos.
Pennsylvania Medicine Journal, Vol. 68, Oct. 1965, pp. 51-53.

JRGI Professional/ Physician, Treatment/ Care, Recovery of Injured, Accident
DDCD Helicopters, Airborne, Power Vehicle, Vehicle

Historical background and organization of Helicopter Emergency Lifesaving Patrol (HELP) of Philadelphia.

04-4135 N

MEDICAL CRITERIA FOR PASSENGER FLYING ON SCHEDULED COMMERCIAL FLIGHTS.
Aerospace Medical Association, Committee on Medical Criteria. 4 March 1961. 2 p.
American Medical Association Journal, Vol. 175, No. 9, 4 March 1961, pp. 796-797.

DDC Airborne, Power Vehicle, Vehicle
JRH Transportation, Recovery of Injured, Accident
YER General Discussions, Contents, Study-Report Type
WS Medical, Methods

04-4136 N

Stonehill, R. B.
THE PATIENT IN COMMERCIAL JET AIRCRAFT.
Air Force Hospital Lackland, Lackland AFB, Texas. 9 July 1960. 3 p. ref.
American Medical Association Journal, Vol. 173, No. 10, 9 July 1960, pp. 1121-1123.

DDC Airborne, Power Vehicle, Vehicle
JRH Transportation, Recovery of Injured, Accident
YER General Discussions, Contents, Study-Report Type
WS Medical, Methods

Author describes and discusses general aeromedical considerations. Discusses suitability of air travel with respect to several common types of medical disorders.

04-4137 S

Bourne, G.
EFFECTS OF FLYING ON PATIENTS WITH CARDIOVASCULAR DISEASE.
St. Bartholomew's Hospital, London (England). 5 Feb. 1955. 4 p. figs. tables. ref.
British Medical Journal, Vol. 4909, 5 Feb. 1955, pp. 310-313.
Conference: World Congress of Cardiology, 2nd, 16 Sept. 1954, Washington.

BIBLIOGRAPHY

- DDC Airborne, Power Vehicle, Vehicle
JNP Consequences/ Complications, Injury/ Trauma, Accident
OAK Cardiovascular System, Anatomy/ Body, Biomedical Aspect

Author reviews 30 cases, all able to travel by air. Emphasizes that each case must be considered on its merits. Data statistics: age; sex; pertinent clinical information; distance of flight.

04-4138 N

- Ware, R. W./ Kahn, A. R.
AUTOMATIC INDIRECT BLOOD PRESSURE DETERMINATION IN FLIGHT.
Air Force School of Aerospace Medicine, Dept. of Bioastronautics, Brooks AFB, Texas. Jan. 1963. 5 p. figs. ref.
Journal of Applied Physiology, Vol. 18, Jan. 1963, pp. 210-214.

- DDC Airborne, Power Vehicle, Vehicle
WUPD Blood Pressure, Physiological, Testing/ Measures, Methods

Authors describe technique and apparatus. Method was developed primarily for aerospace medical use but has been successfully used in other situations.

04-4139 N

- O'Leary, T. J.
AERIAL MEDICAL EVACUATION WITH SPECIAL EMPHASIS ON THE PRECAUTIONS NECESSARY IN PARTICULAR CIRCUMSTANCES.
Royal Flying Doctor Service, Charleville, Queensland (Australia). 23 April 1966. 3 p. ref.
Medical Journal of Australia, Vol. 1, 23 April 1966, pp. 717-719.

- DDC Airborne, Power Vehicle, Vehicle
JRH Transportation, Recovery of Injured, Accident
YER General Discussions, Contents, Study-Report Type

Author reviews his experiences as a flying doctor in a remote and sparsely populated section of Australia.

04-4140 N

- Cara, M./ Poisvert, M.
THE TRANSPORT OF PATIENTS WITH RESPIRATORY INSUFFICIENCY.
Hopital Necker, Paris (France). 24 March 1965. 3 p. ref. figs.
New York Academy of Sciences Annals, Vol. 121, 24 March 1965, pp. 886-890.

- OAL Respiratory System, Anatomy/ Body, Biomedical Aspect
DDC Airborne, Power Vehicle, Vehicle
JRH Transportation, Recovery of Injured, Accident

Authors describe system used to transport seriously ill patients who require treatment en route to the hospital (1800 cases in eight years). Describe standard equipment carried by each unit of transport (airplane, ambulance or helicopter). Briefly describe resuscitation procedures.

04-4141 N

- Waller, D. J.
ASSISTED RESPIRATION IN AIR EVACUATION.
Royal Canadian Air Force, Vancouver (British Columbia). Jan. 1964. 10 p. ref. photos.
Medical Services Journal, Canada, Vol. 20, Jan. 1964, pp. 25-34.
Conference: Surgeon General's Clinical Conference, 4th annual, 25-27 March 1963, Esquimalt, British Columbia.

- DDC Airborne, Power Vehicle, Vehicle
WSBCRM Mechanical, Resuscitation, Maintaining Airways, First Aid, Medical, Methods
WSBCT Tracheostomy
JRH Transportation, Recovery of Injured, Accident

Author describes experience with 24 seriously ill patients with varying degrees of hypoventilation. Describes pre-flight care, in-flight care, and results. Describes the intermittent positive pressure apparatus (Bird MKVII) used, and modifications of apparatus. Concludes that this type of respirator is particularly suitable for air evacuation. Three illustrative case reports.

04-4173 N

- Patti, M./ Giuffrida, L.
L'IMPIEGO DELL'ELICOTTERO QUALE MEZZO DI PRIMO SOCCORSO DURANTE LE OPERAZIONI DI SGOMBERO E DI TRASPORTO SANITARIO. [THE USE OF THE HELICOPTER AS A MEANS OF FIRST AID DURING OPERATIONS OF MEDICAL EVACUATION AND TRANSPORT].
Nov.-Dec. 1965. 4 p.
Annali di medicina navale e tropicale, Vol. 70, Nov.-Dec. 1965, pp. 867-872.

- DDCD Helicopter, Airborne, Power Vehicle, Vehicle
JRGI Professional/ Physician, Treatment/ Care, Recovery of Injured, Accident
YCK Case Studies, Nature of Study, Study-Report Type

Describes operation and experience of the Helicopter Group M.M. di Catania, which, in the last three years, has carried out 94 flights for medical transportation, of which approximately 10% were for traffic accidents. A physician always rides the helicopter, and the need to have this set-up is stressed based on their experience. Some sample cases are mentioned. One particularly demonstrates the need for a physician in care of a patient in acute traumatic shock to give the pilot instructions about flying height and speed, to minimize pressure variation and vibration effects.

04-4174 N

- CANADIAN AIR AMBULANCE SERVICE ANSWERS WIDELY SCATTERED CALLS.**
Jan. 1966. 2 p.
Modern Hospital, Vol. 106, No. 1, Jan. 1966, pp. 64-65.

- DDCB Airplane, Airborne, Power Vehicle, Vehicle
YER General Discussions, Contents, Study-Report Type
JRH Transportation, Recovery of Injured, Accident
JRGI Professional/ Physician, Treatment/ Care

Describes development and use of this service in Alberta. Illustrates by a case outline the procedure of initiating and dealing with a call.

04-4177 S

Lavernhe, J./ Lafontaine, E./ Lequesne, M.
LE TRANSPORT AERIEN, DES MALADES ET BLESSES; A propos d'une serie de 707 observations. [AERIAL TRANSPORT OF THE SICK AND INJURED; Apropos of a series of 707 cases].
23 July 1966. 3 p. tables. ref.
Presse Medicale, Vol. 74, 23 July 1966, pp. 1831-1833.

DDCB Airplanes, Airborne, Power Vehicle, Vehicle
JRH Transportation, Recovery of Injured, Accident
JN Injury/ Trauma
YEF Data Statistics, Contents, Study-Report Type

Listing of conditions of patients to whom admission to flight was refused. Tabulation of illnesses, trauma and surgery conditions of those admitted for flight. Length of flights, types of plane, means of arrival at airport, and type of person accompanying the patient (none, lay, nurse or physician) are tabulated. Precautions and/or emergencies occurring during flight listed.

04-4178 N

Kirby, E. L.
PATROLLING THE ROADS WITH AIRCRAFT.
National Safety Council, Chicago, Illinois. April 1966. 2 p. photos. table.
Traffic Safety, Vol. 66, No. 4, April 1966, pp. 14-15.

DDCB Airplanes, Airborne, Power Vehicle, Vehicle
YCD Survey, Nature of Study, Study-Report Type
JRH Transportation, Recovery of Injured, Accident

Author found 18 of 45 states used aircraft, primarily for detection of traffic violations. Lists some other uses. Concludes chief disadvantage is expense. Tabulates (18 states): aircraft used; hours flown per yr.; types of roads patrolled; number of pilots; observer. Lists reasons for discontinuance (7 states).

04-4183 N

COMBAT CASUALTY MANAGEMENT IN VIETNAM. See 01-4183 N

04-4187 N

Howard, J. R.
HELICOPTERS EXPAND HOSPITAL SERVICE AREA.
Aerospace Industries Association of America, Inc., Washington, D.C. 1965. 5 p. photos.
Source: McGraw-Hill, Inc.
Conference: Flying Physicians' Association, Aug. 1965, Miami Beach, Florida.

DDCD Helicopters

There are 1000 heliports and 860 operators of 2035 helicopters in the U.S. and Canada, but in the entire U.S. only 34 hospitals are known to have designated heliports. Describes heliport site, design, size, cost. The Los Angeles area has 18, the largest network of city-center heliports in the world.

The Indiana University Medical Center uses its heliport to pick up ambulance patients at the city's edge for over-traffic flight to the hospital.

Reference is made to a Helicopter Medical Emergency Service in West Germany.

Lists the designated Hospital Heliports in the U.S.

04-4193 N

THE BLOODY LANES. See 01-4193 N

11-2592 S

TRAFFIC INJURY IN BRISBANE. Report of a general survey. See 01-2592 S

11-3705 S

AN ANALYSIS OF 950 FATAL INJURIES. See 25-3705 S

11-3713 S

EINE ANALYSE VON 827 UNFALLTODESFÄLLEN. [AN ANALYSIS OF 827 CASES OF FATAL ACCIDENTS.] See 24-3713 S

11-3738 S

Schürmann, K.
BESONDERE KREISLAUFREAKTIONEN IM AKUTEN STADIUM DER SCHÄDEL-HIRNSCHÄDIGUNGEN. [SPECIAL CIRCULATORY REACTIONS IN THE ACUTE STAGE OF CRANIOCEREBRAL INJURIES.]
Neurochirurgischen Abteilung der Universität Mainz (Germany). 6 Aug. 1963. 6 p. ref. figs.
Acta Neurochirurgica (Wien), Vol. 11, 6 Aug. 1963, pp. 294-304.

JNF Concussion, Injury/Trauma, Accident
JNH Fracture
JNK Hemorrhage
OAK Cardiovascular System, Anatomy/Body, Biomedical Aspect
OAlA Skull, Head
OANBB Brain, Central, Nervous System
YEF Data Statistics, Contents, Study-Report Type
L Time

1639 brain and skull injury cases were observed during seven and a half years. Material is classified by type of injury and mortality in each group is given. The relative frequency of the shock syndrome is shown. Some sample cases are discussed in detail displaying time-series clinical data on a special tabulation.

11-3741 S

Bischof, W.
PULMONALE UND ENTERALE KOMPLIKATIONEN NACH HIRNSCHÄDIGUNGEN. [PULMONARY AND ENTERAL COMPLICATIONS AFTER BRAIN INJURIES.]
23 April 1964. 11 p. ref. illus. tables.
Acta Neurochirurgica (Wien), Vol. 12, 23 April 1964, pp. 131-151.

OANBB Brain, Central, Nervous System, Anatomy/Body, Biomedical Aspect
OALE Lungs, Respiratory System
OAE Abdomen
L Time
YEF Data Statistics, Contents, Study-Report Type
JNK Hemorrhage, Injury/Trauma, Accident
YCG Laboratory Experiment, Nature of Study

Discusses frequency of acute gastrointestinal hemorrhages after brain surgery and pathological conditions of

BIBLIOGRAPHY

the lungs in 3620 cases, location of cerebral processes that induce intestinal hemorrhage and mortality as function of time after surgery.

With experimental injury in laboratory animals, pulmonary edema and intestinal hemorrhage were frequent. There were no cases of intestinal hemorrhage without pulmonary edema.

The author assumes that during peripheral vasoconstriction in normovolemic neurogenic shock, overloading of the pulmonary circulation occurs which leads to hemorrhages in the alveoli. The hemorrhagic lung edema reaches such proportions that all lobes of the lungs are flooded with blood. The consequent hypoxia leads to the acute gastrointestinal hemorrhage.

The therapeutic consequence of the animal experiments is that in addition to maintaining a free airway one should reduce the peripheral vasoconstriction and thus enlarge the active circulatory area, to reduce likelihood of hemorrhagic lung edema.

11-3742 S

Ketz, E.
HIRNDAUERSCHÄDEN NACH STRASSENVERKEHR-SUNFÄLLEN. [PERMANENT BRAIN INJURIES FOLLOWING TRAFFIC ACCIDENTS.]
Rheinischen Landesklinik für Hirnverletzte, Bonn (Germany). 4 March 1961. 4 p.
Schweizerische Medizinische Wochenschrift, Vol. 91, 4 March 1961, pp. 270-273.

JN Injury/Trauma, Accident
DE Motor Vehicles, Vehicle
OANBB Brain, Central, Nervous System, Anatomy/
Body, Biomedical Aspect
JNP Consequences
YCC State-of-the-Art, Nature of Study, Study-
Report Type

Analyzes etiology of trauma for 119 cases, giving direction of impact, brain area damaged, and frequency of injury for each category of accident (car, motorcycle, pedestrian, etc.). Blunt head injury was predominant.

11-3743 S

DER SCHÄDELVERLETZTE AUS DER SICHT DES ARZTES AM UNFALLORT. [SKULL INJURIES AS SEEN BY THE PHYSICIAN AT THE SITE OF THE ACCIDENT.] See 03-3743 S

11-3744 S

DAS SCHICKSAL DES AM UNFALLORT ÄRZTLICH VERSORGTE SCHÄDELHIRNVERLETZTEN. [THE OUTCOME OF THE CEREBROCRANIAL INJURY GIVEN MEDICAL CARE AT THE ACCIDENT SITE.]
See 03-3744 S

11-3746 S

Nyström, S./ Mäkelä, T.
DAS AKUTE, SUBAKUTE UND CHRONISCHE SUBDURALE HÄMATOM. Bericht über 100 Fälle. [THE ACUTE, SUBACUTE AND CHRONIC SUBDURAL HEMATOMA. Report of 100 cases.]
1964. 8 p. tables. ref.
Acta Neurochirurgica (Wien), Vol. 11, 1964, pp. 565-578.

OANBB Brain, Central, Nervous System, Anatomy/
Body, Biomedical Aspect
JNK Hemorrhage, Injury/Trauma, Accident
YEF Data Statistics, Contents, Study-Report Type
WSC Diagnosis, Medical, Methods
WSD Surgery
L Time

Authors give a brief state-of-the-art survey. 100 cases from Toolo Hospital in Helsinki are classified by severity of trauma. Discussion covers time delays to surgery, methods of treatment, diagnostic procedures, state of consciousness, correlation between findings in angiography and surgery with respect to state of hematoma (solid or liquid). Location of hemorrhage, mortality, and follow-up findings are given.

Frequencies given for all conditions.

11-3747 S

Pia, H. W.
DIE TRAUMATISCHEN HIRNBLUTUNGEN DES KINDESALTERS. [TRAUMATIC CEREBRAL HEMORRHAGES IN CHILDHOOD.]
Neurochirurgischen Universitätsklinik Giessen (Germany). 1964. 10 p. charts. tables. ref.
Acta Neurochirurgica (Wien), Vol. 11, 1964, pp. 583-600.

JN Injury/Trauma, Accident
JNK Hemorrhage
OANBB Brain, Central, Nervous System, Anatomy/
Body, Biomedical Aspect
EC Children, People
L Time
YEF Data Statistics, Contents, Study-Report Type
YEE Reviews

Discusses 412 cases, giving frequencies of various sites of hemorrhage and discussing symptoms, therapy, and mortality rates for epidural hematoma, subdural hematoma, and hydroma. Etiology and frequency of associated damage are covered for subdural hematoma.

11-3752 N

Müller, N.
DIE SEKUNDÄREN MORPHOLOGISCHEN VERÄNDERUNGEN DES GEHIRNS NACH VERLETZUNG DURCH STUMPFE GEWALT. [THE SECONDARY MORPHOLOGICAL BRAIN CHANGES AFTER BLUNT TRAUMA.]
17 June 1966. 6 p. illus. ref.
Deutsche Medizinische Wochenschrift, Vol. 91, 17 June 1966, pp. 1126-1131.

JNP Consequences, Injury/Trauma, Accident
OANBB Brain, Central, Nervous System, Anatomy/
Body, Biomedical Aspect
JNE Contusion/Crushing
YCC State-of-the-Art, Nature of Study, Study-
Report Type

State-of-the-art report. Location, extent, form, and pathogenesis of secondary effects are discussed.

11-3754 S

ERSTE BEHANDLUNG DER VERLETZUNGSFOLGEN BEI STRASSENVERKEHR-SUNFÄLLEN. [FIRST

TREATMENT OF THE COMPLICATIONS OF INJURY WITH TRAFFIC ACCIDENT.] See 23-3754 S

11-3760 S

Orecchia, C./ Lojacono, F./ Sigauo, F.
I TRAUMATISMI CRANIO-CEREBRALI NELLA PRATICA CHIRURGICA OSPEDALIERA (Osservazioni su 200 casi). [CRANIO-CEREBRAL INJURIES IN HOSPITAL SURGICAL PRACTICE (Observations on 200 cases).]

5 April 1964. 5 p. table. ref.
Minerva Chirurgica, Vol. 19, 15 April 1964, pp. 234-238.

WSD Surgery, Medical, Methods
OAI Head, Anatomy/Body, Biomedical Aspect
OANBB Brain, Central, Nervous System
YEF Data Statistics, Contents, Study-Report Type

Authors discuss etiology and advisability of surgery and classify cases by severity, using criteria of physiological parameters, state of consciousness, pupillary reactions, complete neurological examination. Table relates severity group to mortality for tracheostomy, craniotomy, and conservative treatments.

11-3761 S

Caprotti, G./ Tirone, S.
CONSIDERAZIONI CLINICHE E STATISTICHE SU 1513 CRANIOLESI. [CLINICAL AND STATISTICAL CONSIDERATIONS ON 1513 CRANIAL INJURIES.]

31 Oct. 1963. 5 p. tables. ref.
Minerva Chirurgica, Vol. 18, 31 Oct. 1963, pp. 913-917.

YEF Data Statistics, Contents, Study-Report Type
OAI Head, Anatomy/Body, Biomedical Aspect
VN Epidemiology, Disciplines
WSC Diagnosis, Medical, Methods
WSD Surgery

Discuss diagnostic problems and physiopathology of the head-injured patient for various degrees of coma, and summarize etiology of trauma, condition of patient on admission, associated injuries, and clinical results covering 2 years' observations in a Milan hospital. Therapy only discussed very briefly.

11-3784 N

Meacham, W. F.
THE MANAGEMENT OF HEAD INJURIES COMPLICATED BY MAJOR EXTRACRANIAL TRAUMA.

1964. 6 p. ref.
Clinical Neurosurgery, Vol. 12, 1964, pp. 161-170.

JN Injury/Trauma, Accident
OAI Head, Anatomy/Body, Biomedical Aspect
OAF Thorax
OAE Abdomen
JNX Multiple Severe Injuries
YCC State-of-the-Art, Nature of Study, Study-Report Type

Clinical priorities following head injury and establishing adequate blood circulation before diagnosis of causes of shock are discussed. Management with complicating thoracic and abdominal injuries, injuries to the great vessels of the neck, and post-traumatic fat embolism is also discussed.

11-3792 S

Youmans, J. R.
CAUSES OF SHOCK WITH HEAD INJURY.
South Carolina Medical College, Div. of Neurological Surgery, Charleston. March 1964. 3 p. tables. ref.
Journal of Trauma, Vol. 4, March 1964, pp. 204-209.
Grant No: NB-04991-01.
Sponsor: National Institutes of Health.
Conference: American Association for the Surgery of Trauma, 23rd annual, 24-26 Oct. 1963, San Francisco, California.

JN Injury/ Trauma, Accident
JNPL Shock, Consequences
JNX Multiple Severe Injuries
OAI Head, Anatomy/Body, Biomedical Aspects
JNPM Anoxia/Hypoxia
YEF Data Statistics, Contents, Study-Report Type

Of 654 patients with diagnosis of head injury during seven-year period, only 13.1% were in any degree of shock. Author found shock to be due to one or more of the following: blood loss, brain injury, general trauma, hypoxia, and "spinal shock." If severely injured patient does not have bilaterally dilated and fixed pupil and if airway is adequate, shock is almost always on basis other than head injury.

11-3793 N

Stark, R. B.
EARLY VERSUS LATE TREATMENT OF FACIAL FRACTURES.

St. Luke's Hospital, Robert Abbe Laboratory of Plastic Surgery, New York. 1964. 5 p. photos. figs. ref.
Journal of Trauma, Vol. 4, March 1964, pp. 158-167.
Conference: American Association for the Surgery of Trauma, 23rd annual, 24-26 Oct. 1963, San Francisco, California.

L Time
JNH Fracture, Injury/Trauma, Accident
WSE Therapeutic, Medical, Methods
OAIB Face, Head, Anatomy/Body, Biomedical Aspect

Brief state-of-the-art report for treatment of facial fractures, with discussion of early fixation of bony fragments (two weeks or less after injury) versus late treatment. Direct wiring is described and recommended. Case reports are given.

11-3802 S

PEDESTRIAN DEATHS IN OSLO TRAFFIC ACCIDENTS. See 18-3802 S

11-3854 S

Lewis, N. R.
REHABILITATION AFTER HEAD INJURY.
Great Britain Royal Air Force, Medical Rehabilitation Unit, Chessington (England). 1966. 3 p. tables.
Royal Society of Medicine. Proceedings, Vol. 59, July 1966, pp. 623-625.

OAI Head, Anatomy/Body, Biomedical Aspect
JNP Consequences, Injury/Trauma, Accident
L Time
YCK Case Studies, Nature of Study, Study-Report Type

BIBLIOGRAPHY

Discusses 140 airmen with head injuries admitted to RAF Rehabilitation Unit from 1956 to 1966. Physical examination and psychometric tests on arrival were used to assess progress. Periods of unconsciousness are correlated to defects resulting from head injury, time in hospital, time at Rehabilitation Unit, and number of invalids.

11-3880 S

Miller, H./ Stern, G.
THE LONG-TERM PROGNOSIS OF SEVERE HEAD INJURY.
Newcastle Univ., Dept. of Neurology. 30 Jan. 1965. 5 p. ref.
The Lancet, Vol. 1, 30 Jan. 1965, pp. 225-229.

JNE Contusion/Crushing, Injury/Trauma, Accident
JNF Concussion
JNH Fracture
JNP Consequences
OAI Head, Anatomy/Body, Biomedical Aspect
YCK Case Studies, Nature of Study, Study-Report Type
YEF Data Statistics, Contents

Long-term follow-up study of 100 consecutive cases of severe head injury with post-traumatic amnesia is reported. Sixty-four injuries resulted from traffic accidents. Only one death was attributable to sequelae of head injury. Sixteen patients manifested psychiatric symptoms on re-examination, and 19 developed epilepsy. Half of patients escaped loss of occupational status. Brief case reports are included.

11-3882 S

THE PATHOLOGY OF PEDESTRIAN AUTOMOTIVE ACCIDENT VICTIMS. See 21-3882 S

11-3884 S

Raaf, J.
TREATMENT OF THE PATIENT WITH ACUTE HEAD INJURY.
Oregon Univ. Medical School, Dept. of Neurosurgery, Portland/ Good Samaritan Hospital, Portland, Oregon. March 1964. 4 p. figs. tables.
Journal of Trauma, Vol. 4, March 1964, pp. 168-174.
Conference: American Association for the Surgery of Trauma, 23rd annual, 24-26 Oct. 1963, San Francisco, California.

OAI Head, Anatomy/Body, Biomedical Aspect
WSE Therapeutic, Medical, Methods
WSD Surgery
YEF Data Statistics, Contents, Study-Report Type
JNH Fracture, Injury/Trauma, Accident

Mortality rates by type of treatment and five-year period are given for 2,024 patients with craniocerebral injury treated from 1937 through 1962. Elevation of simple depressed skull fracture, debridement of compound skull fracture, evacuation of intracranial hematoma, internal decompression, drainage of meningeal effusions, and decompression by bone removal are discussed.

11-3922 S

Rowbotham, G. F./ Maciver, I. N./ Dickson, J./ Bousfield, M. E.
ANALYSIS OF 1,400 CASES OF ACUTE INJURY TO THE HEAD.
Newcastle Regional Centre of Neurological Surgery (England). 27 March 1954. 5 p. tables.
British Medical Journal, Vol. 1, 27 March 1954, pp. 726-730.
Sponsor: Newcastle Regional Hospital Board, No. 1.

JNH Fracture, Injury/Trauma, Accident
JNF Concussion
YEF Data Statistics, Contents, Study-Report Type
OAI Head, Anatomy/Body, Biomedical Aspect
OANBB Brain, Central, Nervous System
JNK Hemorrhage

Etiology, severity and nature of injury, cause of death, and appraisal of surgical treatment are given for 1000 adults and 400 children, 1945-1951, grouping cases by state of coma, semicoma, confusion or full consciousness on admission. Etiology and mortality are tabulated by age and sex, and extradural hemorrhages and crushing injuries of head are discussed in detail. Follow-up reports on survivors are discussed.

11-3923 N

Edberg, S./ Rieker, J./ Angrist, A. A.
INTRACEREBRAL VASCULAR LESIONS FOLLOWING CRANIAL IMPACT: A proposed mechanism.
Albert Einstein College of Medicine, Dept. of Pathology, Bronx, New York/ New York City Office of the Chief Medical Examiner. April 1965. 5 p. figs. ref.
Journal of Forensic Sciences, Vol. 10, No. 2, April 1965, pp. 158-166.
Conference: American Academy of Forensic Sciences, 16th annual, 27 Feb. 1964, Chicago, Illinois.

OAI Head, Anatomy/Body, Biomedical Aspect
OAKC Blood Vessels, Cardiovascular System
JNF Concussion, Injury/Trauma, Accident
YCG Laboratory Experiment, Nature of Study, Study-Report Type
VMB Biomechanics, Biomedical Sciences, Disciplines

The authors describe past experiments to record effects of impact on skull models, and current study of traumatic intracerebral hemorrhages with box model of intracerebral vascular system. Suggest reversal on impact of blood flow at venous capillary junction, with likelihood of rupture and hemorrhage. Short state-of-the-art discussion.

11-3932 S

Denny-Brown, D.
DISABILITY ARISING FROM CLOSED HEAD INJURY.
Boston City Hospital, Neurological Unit, Massachusetts/ Harvard Medical School, Dept. of Neurology, Cambridge, Massachusetts. 24 Feb. 1945. 8 p. tables.
American Medical Association Journal, Vol. 127, No. 8, 24 Feb. 1945, pp. 429-436.

JNF Concussion, Injury/Trauma, Accident
OAI Head, Anatomy/Body, Biomedical Aspect
JNP Consequences
P Psychological Aspect

BIBLIOGRAPHY

YCC State-of-the-Art, Nature of Study, Study-Report Type
YEF Data Statistics, Contents

Contains brief state-of-the-art report. Investigators analyzed 200 cases, with follow-up from four months to over a year later. Frequencies are given for duration of absence from work as a function of age, sex, education, occupation, psychiatric evaluation of post-traumatic state, other injury, clinical conditions, tests (EEG, intellectual performance, etc.), and complications.

11-3933 S

Barr, J. B./ Ralston, G. J.
HEAD INJURIES IN A PERIPHERAL HOSPITAL: A five-year survey.
Kilmarnock Infirmary (Scotland). 5 Sept. 1964. 4 p. figs. ref. table.
The Lancet, Vol. 2, 5 Sept. 1964, pp. 519-522.

OAI Head, Anatomy/Body, Biomedical Aspect
JNF Concussion, Injury/Trauma, Accident
YEF Data Statistics, Contents, Study-Report Type
WSE Therapeutic, Medical, Methods
JNP Consequences

Survey management of head injuries in hospitals with no special neurosurgical facilities. Provide critical review of nature, frequency, etiology, and management of 532 acute head injuries in mixed agricultural and industrial area. Frequency of causes by age and sex, fatality rates according to various levels of consciousness on admission, time lost from work, and some information on length of stay in the hospital are given. Follow-up questionnaire one and four years after injury showed no significant difference in the complaints about the effects of head injury. Recommend formation of head injury rehabilitation center.

11-3938 S

Hendrick, E. B./ Harwood-Hash, D. C. F./ Hudson, A. R.
HEAD INJURIES IN CHILDREN: A survey of 4465 consecutive cases at the Hospital for Sick Children, Toronto, Canada.
1964. 10 p. graph. tables. ref.
Clinical Neurosurgery, Vol. 11, 1964, pp. 46-65.
Sponsor: Hospital for Sick Children, Surgical Studies Fund, Toronto (Canada).

JNH Fracture, Injury/Trauma, Accident
JNE Contusion/Crushing/Blunt
JNF Concussion
EA Age, People
EC Children
YEF Data Statistics, Contents, Study-Report Type
OAI Head, Anatomy/Body, Biomedical Aspect
VN Epidemiology/Etiology, Disciplines
L Time
WSC Diagnosis, Medical, Methods
WSD Surgery
JNK Hemorrhage

Study covers 1954-1962 and includes only children under fifteen. Types of accidents are compared for various age groups. Level of consciousness is correlated with triad of extradural hematoma, subdural hematoma, and brain damage. If shock was present, cause was extracranial. Types and location of linear or depressed fracture are discussed. Neurological signs are discussed

and their frequency of occurrence given. Diagnostic studies, therapy, and additional surgery are discussed.

11-3960 S

Nick, J./ Sicard-Nick, C.
LES CEPHALÉES POST-TRAUMATIQUES TARDIVES. Étude sémiologique, physiopathologique et thérapeutique, a propos de 240 cas. [LATE POST-TRAUMATIC HEADACHE. Symptomatology, physiopathological and therapeutic study, apropos of 240 cases.]
30 Oct. 1965. 6 p. ref. tables.
La Presse Medicale, Vol. 73, 30 Oct. 1965, pp. 2587-2592.

OAI Head, Anatomy/Body, Biomedical Aspect
OANBB Brain, Central, Nervous System
JNE Contusion/ Crushing/Blunt, Injury/Trauma, Accident
JNF Concussion
JNP Consequences/Complications
YEF Data Statistics, Contents, Study-Report Type
NKFP Period, Frequency/Time, Operating Conditions, Physical Aspect
PF Behavioral Factors, Psychological Aspect

Authors define chronic post-traumatic headache when the pain persists or appears three months after the injury. Frequency of cases is given according to the length of the period of coma. Aches are classified as local, cervical, and psychological with frequency again given by length of unconsciousness. Another classification is given by arterial, venous, neuralgic, and "localized, undefined." Frequency according to unconsciousness given. Therapies are discussed.

11-3963 S

Obrador Alcalde, S.
TRAUMATISMOS CRANEOENCEFALICOS. [CRANIO-CEREBRAL TRAUMA.]
15 Aug. 1966. 7 p. table.
Revista Clinica Española, Vol. 102, 15 Aug. 1966, pp. 174-180.

OAI Head, Anatomy/Body, Biomedical Aspect
OANBB Brain, Central, Nervous System
JNH Fracture, Injury/Trauma, Accident
JNE Contusion/Crushing/Blunt
YEF Data Statistics, Contents, Study-Report Type
WSC Diagnosis, Medical, Methods
WSE Therapeutic

Brief state-of-the-art report. Author discusses data from own clinic, giving etiology of trauma and details of cases with and without skull fracture or severe brain injury, and refers to frequency of surgical cases in each group, associated injury, and mortality.

11-3964 N

Kramer, G.
ZUR ERSTVERSORGUNG SCHWERSTER SCHÄDELHIRNTRAUMEN. [ON FIRST AID IN VERY SEVERE CRANIOCEREBRAL TRAUMAS.]
7 April 1962. 6 p. ref.
Medizinische Welt, Vol. 14, 7 April 1962, pp. 739-744.

OANBB Brain, Central, Nervous System, Anatomy/Body, Biomedical Aspect

BIBLIOGRAPHY

- OAI Head
JN Injury/Trauma, Accident
YCC State-of-the-Art, Nature of Study, Study-Report Type
JNPL Shock, Consequences/Complications
JNPM Anoxia/Hypoxia
WSC Diagnosis, Medical, Methods
- Brief literature review. Importance of ventilation, circulation, and control of agitated patient are discussed. Hypothermia is discussed separately. Difficulty of diagnosis of intra-cranial hemorrhage is pointed out.
- 11-3966 S
Pothe, H.
ZUR DIAGNOSTIK UND THERAPIE DER EPIDURALEN BLUTUNG. [DIAGNOSIS AND TREATMENT OF EPIDURAL HEMORRHAGE.]
Chirurgischen Klinik der Medizinischen Akademie Erfurt (Germany). 1966. 7 p. figs. table. ref.
Deutsche Medizinische Wochenschrift, Vol. 91, 1966, pp. 1186-1192.
- JNK Hemorrhage, Injury/Trauma, Accident
OANBB Brain, Central, Nervous System, Anatomy/Body, Biomedical Aspect
WSC Diagnosis, Medical, Methods
WSE Therapeutic
YEF Data Statistics, Contents, Study-Report Type
JNP Consequences/Complications
- Author's observations from 15 years of records, covering 3,247 cases of closed injury to brain. Tabulation shows etiology, consequences, surgery and final outcome for 33 cases of epidural hemorrhage. Diagnostic procedures are discussed. Case histories reported.
- 11-3976 S
DER TÖDLICHE VERKEHRSUNFALL AUS DER SICHT DES PATHOLOGEN. [THE FATAL TRAFFIC ACCIDENT FROM THE PATHOLOGIST'S VIEWPOINT.] See 23-3976 S
- 11-3978 S
DER OPERATIONSWAGEN DER CHIRURGISCHEN UNIVERSITÄTSKLINIK HEIDELBERG. [THE MOBILE OPERATING ROOM OF THE CHIRURGISCHE UNIVERSITÄTSKLINIK HEIDELBERG.] See 03-3978 S
- 11-3982 S
ERSTE HILFE AM UNFALLORT UNTER EINSCHLUSS DER FEHLER UND GEFAHREN. [FIRST AID AT THE ACCIDENT SITE WITH REFERENCE TO ERRORS AND DANGERS.] See 03-3982 S
- 11-4002 S
Schrire, T.
THE COMATOSE INJURED PATIENT.
Groote Schuur Hospital, Casualty Dept., Cape Town (South Africa)/ Cape Town Univ., Dept. of Surgery (South Africa). 8 Sept. 1962. 5 p. table. ref.
South African Medical Journal, Vol. 36, 8 Sept. 1962, pp. 747-751.
- JNX Multiple Severe Injuries, Injury/Trauma, Accident
- YEF Data Statistics, Contents, Study-Report Type
OAI Head, Anatomy/Body, Biomedical Aspect
WSC Diagnosis, Medical, Methods
WSE Therapeutic
- Studies 169 patients treated by a multiple injury unit. Author describes principles of management, diagnostic procedures, routine examination, and priorities for treatment. Stresses the severity of a concomitant chest injury. Data statistics: associated injuries; mortality; causes of death; concomitant chest injury and mortality; type of head injury and mortality in 1303 patients admitted to neurosurgical service.
- 11-4009 S
INJURIES FROM ROAD ACCIDENTS. See 18-4009 S
- 11-4027 S
MULTIPLE INJURIES: The management of the patient with a fractured femur and a head injury. See 17-4027 S
- 11-4042 S
Wallace, P. B./ Meirowsky, A. M.
THE REPAIR OF DURAL DEFECTS BY GRAFT: An analysis of 540 penetrating wounds of the brain incurred in the Korean War.
Vanderbilt Univ. School of Medicine, Dept. of Surgery, Div. of Neurological Surgery, Nashville, Tennessee. Feb. 1960. 4 p. tables. fig. ref.
Annals of Surgery, Vol. 151, No. 2, Feb. 1960, pp. 174-180.
- OANBB Brain, Central, Nervous System, Anatomy/Body, Biomedical Aspect
JNG Laceration/Openwound/Penetrating, Injury/Trauma, Accident
WSD Surgery, Medical, Methods
VN Epidemiology/Etiology, Disciplines
YEF Data Statistics, Contents, Study-Report Type
JNP Consequences/Complications
- Provides description and evaluation of surgical techniques for the following types of graft: fascia lata, temporal or occipital fascia, periosteum, and gelfilm or fibrin film. Cites case report of cortical herniation resulting from defective graft. Advantages of watertight closure of dural defect include: fluid fistula, facilitation of cranioplasty, and avoidance of corticomeningeal scar formation.
- 11-4063 S
Thum, H. J.
DIE BEURTEILUNG UND BEHANDLUNG SCHÄDELVERLETZTER: Beobachtungen bei 7486 Schädelverletzten. [THE EVALUATION AND THERAPY OF SKULL INJURIES: Observations on 7486 skull injuries].
1 Jan. 1960. 4 p. figs.
Deutsche Medizinische Wochenschrift, Vol. 85, 1 Jan. 1960, pp. 31-34.
- JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
JNF Concussion
JNG Laceration/Openwound/Penetrating
OAI Skull, Head, Anatomy/Body, Biomedical Aspect

OANBB Brain, Central, Nervous System
YEF Data Statistics, Contents, Study-Report Type
WSE Therapeutic, Medical, Methods

Author comments on experience from 1952 to 1956. No correlation was found between severity of external injury and the severity of the total injury (i.e., including brain injury) in those cases where no skull fracture had occurred.

Diagnosis and therapy are discussed. Comotio and contusio are defined and discussed.

11-4068 S

Bohmer, G./ Carlsson, C. A.
ENTSCHEIDENDE FAKTOREN FUR DEN BEHANDLUNGSERFOLG BEIM EPIDURALHAMATOM: Eine Analyse von 64 Fallen. [DECISIVE FACTORS IN THE SUCCESS OF TREATMENT OF EPIDURAL HEMATOMA: An analysis of 64 cases].
Sodersjukhuset Neurochirurgischen Klinik, Stockholm (Sweden). Oct. 1964. 8 p. tables. charts. ref.
Monatsschrift fur Unfallheilkunde, Vol. 67, Oct. 1964, pp. 414-428.

JNK Hemorrhage, Injury/Trauma, Accident
OANBB Brain, Central, Nervous System, Anatomy/Body, Biomedical Aspect
WSE Therapeutic, Medical, Methods
JNE Contusion/Crushing/Blunt
EA Age, People
VN Epidemiology/Etiology, Disciplines
JNP Consequences/Complications

Mortality rates from literature are compared. Age distributions, mortality rates and etiology of trauma are discussed. State of consciousness and mortality are correlated. The frequency of neurologic symptoms is given. Time interval to surgery, and mortality are displayed on graph, coded by the neurologic symptoms.

Frequency of deaths and survivors are given for each type of symptom. X ray, echoencephalography, surgery, and associated injuries, and follow-up results are discussed. Causes of death are given. Mortality rate of 36% could have been 12% if all cases had been operated on in time.

11-4081 S

A PROPOS DE 268 TRAUMATISMES THORACIQUES FERMES. [A PROPOS OF 268 CLOSED CHEST INJURIES.] See 13-4081 S

11-4086 S

Nockemann, P. F.
DIE HIRNERSCHÜTTERUNG: Ergebnisse aus der Behandlung von 3056 Fällen. [BRAIN CONCUSSION: Results from the therapy of 3056 cases.]
28 May 1960. 7 p. tables. ref.
Zentralblatt fur Chirurgie, Vol. 85, 28 May 1960, pp. 1232-1245.

OANBB Brain, Central, Nervous System, Anatomy/Body, Biomedical Aspect
JNF Concussion, Injury/Trauma, Accident
YEF Data Statistics, Contents, Study-Report Type
YCC State-of-the-Art, Nature of Study

State-of-the-art discussion. Author gives etiology of trauma. Tabulates length of unconsciousness for 1,266

cases, and number of cases of circulatory disturbances as result of commotio by severity of disturbance and by year. Average length of stationary treatment 8.2 days, average length of inability to work 31.9 days.

11-4089 S

Nockemann, P. F.
DIE WIEDEREINGLIEDERUNG SCHADEL-HIRN-VERLETZTER: Ergebnisse aus der Behandlung von 4139 Fallen. [REHABILITATION OF CRANIO-CEREBRAL INJURIES: Results of therapy of 4139 cases.]
4 June 1960. 7 p. ref. tables. graphs.
Medizinische Welt, Vol. 23, 4 June 1960, pp. 1288-1294.

JNF Concussion, Injury/Trauma, Accident
OAI Head, Anatomy/Body, Biomedical Aspect
OANBB Brain, Central, Nervous System
NKF Frequency/Time, Operating Conditions, Physical Aspect

Author makes a literature survey and discusses state-of-the-art. Tabulates types of skull fractures for 952 cases, and discusses therapy and complications for facial bones, skull basis and upper skull.

Length in days for stationary treatment of 1266 cases of commotio cerebri is represented on a graph (minimum 1 day, maximum 25 days, peak frequency about 7 days). Similar graph for length of disability to work (minimum 2 days, maximum 60, peak frequency 29 days). Frequency of various types of skull and brain injuries are tabulated by year (1953 to 1958). Length of stationary treatment for 89 closed skull-brain injuries is compared to that of 21 open skull-brain injuries. Frequency of disability to work displayed for the same cases.

Rehabilitation toward occupation same as pre-accident employment, stepwise rehabilitation, change in occupation, and permanent disability, are tabulated for closed brain injury, open brain injury, and commotio. Frequencies of insurance and/or pensions are discussed.

11-4092 S

Crozzoli, N. R.
CONSIDERAZIONI STATISTICHE E DI TERAPIA SU 517 TRAUMATIZZATI CRANIO-ENCEFALICI. [STATISTICAL AND THERAPEUTIC CONSIDERATIONS ON 517 PATIENTS WITH CRANIOCEREBRAL INJURIES.]
3 March 1966. 9 p. tables. charts. figs. ref.
Minerva Medica, Vol. 57, 3 March 1966, pp. 745-753.

JN Injury/Trauma, Accident
JNB Fatal
JNH Fracture
OAI Head, Anatomy/Body, Biomedical Aspect
OANBB Brain, Central, Nervous System
VN Epidemiology/Etiology, Disciplines
EA Age, People
EF Sex
JNX Multiple Severe Injuries
YEF Data Statistics, Contents, Study-Report Type

Etiology of trauma given: age, type of accident, frequency of commotio, contusio, hematoma, and lacerations, given with and without skull fracture, and with associated injuries. Associated injuries are tabulated in detail by type.

Types of skull fracture given with respective frequen-

BIBLIOGRAPHY

cies. Etiology given for 48 fatalities, compared with diagnosis and causes of death. Consequences and therapy of head injuries discussed.

11-4104 S

Wray, J. B./ Davis, C. H.

THE MANAGEMENT OF SKELETAL FRACTURES IN THE PATIENT WITH A HEAD INJURY.

Bowman Gray School of Medicine, Dept. of Surgery, Winston-Salem, North Carolina. June 1960. 6 p. table. figs. ref.

Southern Medical Journal, Vol. 53, June 1960, pp. 748-753.

Conference: Southern Medical Association, Section on Orthopedic and Traumatic Surgery, 53rd annual, 16-19 Nov. 1959, Atlanta, Georgia.

OAI Head, Anatomy/Body, Biomedical Aspect
 OAO Musculo-Skeletal System
 JNH Fracture, Injury/Trauma, Accident
 YEF Data Statistics, Contents, Study-Report Type
 WSC Diagnosis, Medical, Methods
 WSE Therapeutic

Discuss, with some case studies, 75 patients (1949-1958) with significant head injuries and skeletal fractures, giving frequency of injuries by body area. Principles of management are given and priorities established for injuries affecting vascular, respiratory, or other vital organs. Mortality rate in closed head injury was over double that in compound head injuries.

11-4106 S

UNRECOGNIZED ABDOMINAL TRAUMA IN PATIENTS WITH HEAD INJURIES. See 15-4106 S

11-4107 S

Brandesky, G.

SEVERE HEAD INJURIES IN CHILDREN: Treatment and long-range outlook.

2nd Surgical Clinic, Univ. of Vienna, Vienna, Austria. March 1965. 6 p. tables. figs. ref.

Clinical Pediatrics, Vol. 4, March 1965, pp. 141-146.

Conference: British Association of Paediatric Surgeons, XIth International Congress, 31 Aug.-4 Sept. 1965, Rotterdam.

OAI Head, Anatomy/Body, Biomedical Aspect
 WSE Therapeutic, Medical, Methods
 YEF Data Statistics, Contents, Study-Report Type
 EC Children, People

Discusses review and follow-up of cases of children up to age 16 from 1950 to 1959. Frequency of diagnoses, neurological disorders, combined injuries, and deaths are tabulated. Through follow-up studies, incidence of late symptoms is tabulated as a function of concussion or fracture. Some cases are cited. Author could not find that duration of unconsciousness indicates degree of cerebral injury. Concludes that children have much better chance of survival after severe craniocerebral trauma than do adults.

11-4108 S

Irving, M. H./ Irving, P. M.

ASSOCIATED INJURIES IN HEAD INJURED PATIENTS.

Newcastle General Hospital, Regional Neurological Centre (England)/ Sydney Univ., Dept. of Surgery, Sydney, New South Wales (Australia). 1967. 12 p. figs. ref.

Journal of Trauma, Vol. 7, No. 4, 1967, pp. 500-511.

JN Injury/Trauma, Accident
 OAI Head, Anatomy/Body, Biomedical Aspect
 JNX Multiple Severe Injuries
 YEF Data Statistics, Contents, Study-Report Type
 WSC Diagnosis, Medical, Methods
 OAIB Face
 OAF Thorax
 OAE Abdomen

354 patients with head injuries, 47% with significant associated injuries. Authors describe and discuss the most common types of associated injuries particularly with respect to diagnostic problems. Data statistics: type of accident and severity of associated injury; type of accident, severity of associated injury and mortality; types of associated injuries and diagnostic difficulties; number of significant injuries.

11-4119 S

FATAL TRAFFIC ACCIDENTS IN BRISBANE FROM 1935 TO 1964. See 21-4119 S

11-4124 S

McKissock, W./ Taylor, J. C./ Bloom, W. H./ Till, K.

EXTRADURAL HAEMATOMA: Observations of 125 cases.

St. George's Hospital, Dept. of Neurosurgery, London (England)/ Hospital for Sick Children, London (England). 23 July 1960. 6 p. tables. ref.

Lancet, Vol. 2, 23 July 1960, pp. 167-172.

JNK Hemorrhage, Injury/Trauma, Accident
 OAI Head, Anatomy/Body, Biomedical Aspect
 VN Epidemiology/Etiology, Disciplines
 YEF Data Statistics, Contents, Study-Report Type
 WSE Therapeutic, Medical, Methods
 WSI Autopsy/ Pathology

Authors describe and discuss clinical features, diagnosis, treatment, and prognosis in adults and children. Analyze data and find prognosis to be correlated with: age; level of consciousness at time of operation; and rate of evolution. Discuss errors in management and emphasize need for prompt diagnosis. Data statistics: age; sex; type of accident; clinical picture; mortality; treatment; post-mortem findings; disability; interval between operation and injury; absence of skull fracture; level of consciousness.

11-4151 N

Lundberg, N./ Troupp, H./ Lorin, H.

CONTINUOUS RECORDING OF THE VENTRICULAR-FLUID PRESSURE IN PATIENTS WITH SEVERE ACUTE TRAUMATIC BRAIN INJURY: A preliminary report.

Lund Univ., Dept. of Neurological Surgery (Sweden). June 1965. 6 p. figs. ref.

Journal of Neurosurgery, Vol. 22, June 1965, pp. 581-590.

Conference: Scandinavian Neurosurgical Society, 17th annual, Sept. 1963, Helsinki.

JNE Contusion/ Crushing/ Blunt, Injury/ Trauma, Accident
WU Testing/ Measures, Methods
OANBB Brain, Central, Nervous System, Anatomy/ Body, Biomedical Aspect

Authors describe methods and materials. Describe and discuss findings, comparing them with findings in non-traumatic cases. Conclude that procedure is safe and offers a more rational basis for treatment than do conventional control methods. 4 illustrative case reports.

11-4162 N

Akerlund, E.
THE LATE PROGNOSIS IN SEVERE HEAD INJURIES.
Falu Lasarett, Dept. of Surgery, Falun (Sweden). July 1959. 2 p. tables.
Acta Chirurgica Scandinavica, Vol. 117, July 1959, pp. 275-277.

OAI Head, Anatomy/ Body, Biomedical Aspect
JNP Consequences/ Complications, Injury/ Trauma, Accident
VN Epidemiology/ Etiology, Disciplines

Twenty-six patients who survived after being unconscious for at least a week. Author concludes grave neurologic defects can be anticipated when unconsciousness lasts for more than a month. Data statistics: age; origin of injury; duration of unconsciousness and status at follow-up; main causes of disability.

11-4166 S

Happel, W./ Ketz, E./ Peters, G.
ZUR DIFFERENTIALDIAGNOSE GEDECKTER HIRNDAUERSCHÄDEN: eine Übersicht über 4031 Fälle. [ON THE DIFFERENTIAL DIAGNOSIS OF PERMANENT CLOSED BRAIN INJURIES: A survey of 4031 cases.]
1963. 11 p. tables. ref.
Deutsche Zeitschrift für Nervenheilkunde, Vol. 184, 1963, pp. 487-507.

JNF Concussions, Injury/ Trauma, Accident
JNE Contusion/ Crushing/ Blunt
JNP Consequences/ Complications
OANBB Brain, Central, Nervous System, Anatomy/ Body, Biomedical Aspect
NKFF Delay, Frequency/ Time, Operating Conditions, Physical Aspect
YEF Data Statistics, Contents, Study-Report Type
VN Epidemiology/ Etiology, Disciplines

Brief state-of-the-art report. Of 10,000 patients admitted to the Bonn clinic for brain injuries from 1952 to 1960, authors selected 4,031 on the basis of pre-admission records, encephalographic and electrophysiologic reports as victims of traumatic, permanent brain injury. Give etiology and age distribution according to type of trauma (open or closed). High number of war injuries (penetrating trauma).

For blunt trauma reversibility of brain damage tabulated as a function of length of unconsciousness. Chi-square tests indicate not always significant correlation. Another table correlates length of unconsciousness to level of impact of traumatic agent. Blunt trauma on large area significantly correlated to long unconsciousness, as opposed to penetrating and blunt trauma on small

impact area. No correlation found (chi-square test) between length of unconsciousness and condition or absence of skull fracture.

Period of unconsciousness correlated to direction of impact. Fewer cases without unconsciousness for front impact than back or side impact.

Clinical symptoms of permanent injury to brain, tabulated for 1042 cases, as a function of direction of impact. Aphasia, alexia, agraphia, and acalculia, occur most frequently with left side impact. Initial psychoses associated with blunt impact caused on large area.

11-4199 N

Segerberg, L. H./ Spurling, R. G.
ACUTE CRANIOCEREBRAL TRAUMA: Essential considerations of diagnosis and treatment.
Louisville Univ., Dept. of Surgery, Kentucky. 8 Oct. 1949. 6 p.
American Medical Association. Journal, Vol. 141, No. 6, 8 Oct. 1949, pp. 371-376.
Conference: American Medical Association, Section on Surgery, General and Abdominal, 9 June 1949, Atlantic City, New Jersey.

OAI Head, Anatomy/ Body, Biomedical Aspect
OANBB Brain, Central, Nervous System
JN Injury/ Trauma, Accident
WSC Diagnosis, Medical, Methods
YER General Discussions, Contents, Study-Report Type

Authors outline and discuss essential considerations in the diagnosis and treatment of acute head injuries. Article is intended for physicians, other than neurosurgeons, who routinely encounter such injuries.

11-4337 S

ROAD ACCIDENTS. See 03-4337 S

11-4501 S

THE INCIDENCE AND SIGNIFICANCE OF SHOCK IN HEAD INJURY. See 24-4501 S

11-4502 S

Ulin, A. W./ Rosomoff, H. L./ Berkowitz, D./ Olsen, A. K.
ACUTE HEAD INJURY: A review of one thousand cases.
Hahnemann Medical College and Hospital, Dept. of Surgery, Philadelphia, Pennsylvania. 1953. 6 p. tables. ref.
American Surgeon, Vol. 19, 1953, pp. 226-236.

OAI Head, Anatomy/ Body, Biomedical Aspect
OANBB Brain, Central, Nervous System
YEF Data Statistics, Contents, Study-Report Type
JNX Multiple Severe Injuries, Injury/ Trauma, Accident
OAL Respiratory System

Authors present classification of head injuries. Recommend classification as a practical clinical approach to assessing severity of patient's condition. Discuss selective hospitalization, use of X ray in diagnosis, significance of neurologic signs and coma, spinal type, concomitant systemic injury and associated medical disease, factors contributing to mortality, indications for tracheostomy, and indications for exploratory craniotomy. Data statistics: mortality; type of head injury; complications; and neurologic manifestations.

BIBLIOGRAPHY

11-4504 S
DIED IN HOSPITAL: A three-year study of deaths following trauma. See 21-4504 S

11-4536 S
Burner, M./ Regli, F./ del Vivo, R. E.
KLINISCHE ERFAHRUNGEN IN DER NEURO-
CHIRURGISCHEN KLINIK ZÜRICH BEI AKUTEN
SCHÄDEL-HIRN-VERLETZUNGEN. [CLINICAL EX-
PERIENCES IN THE NEUROSURGICAL CLINIC IN
ZÜRICH WITH ACUTE SKULL AND BRAIN INJU-
RIES].
15 June 1961. 14 p. tables, figs.
Zeitschrift fuer Unfallmedizin und Berufskrankheiten,
Vol. 54, 15 June 1961, pp. 123-144.

JN Injury/Trauma, Accident
OAI Head, Anatomy/ Body, Biomedical Aspect
OANBB Brain, Central, Nervous System
YEF Data Statistics, Contents, Program-Report
Type
WSC Diagnosis, Medical, Methods
JNP Consequences/ Complications
JNF Concussion
JNH Fracture
JNK Hemorrhage

289 cases of acute brain-skull injury patients are analyzed. Types of hemorrhage (epi- and sub-dural or combinations, intra-cerebral), contusions without hemorrhage, and brain lacerations are tabulated. Delay from accident to admission and from admission to surgery are tabulated. The free interval is discussed.

Mortality, type of injury, severity of unconsciousness are correlated. Etiology, state of unconsciousness, neurologic symptoms, type of injury, post-operative therapy and results are shown on table.

11-4537 S
Dubitscher, F.
FESTSTELLUNGEN BEI 1000 HIRNVERLETZTEN AN
HAND DER VERSORGUNGSSAMTSAKTEN. [FIN-
DINGS IN 1000 BRAIN-INJURED PERSONS ON THE
BASIS OF VETERANS' COMPENSATION RECORDS].
Sept. 1959. 10 p. tables.
*Monatsschrift für Unfallheilkunde, Versicherungs- und
Verkehrmedizin*, Vol. 62, Sept. 1959, pp. 321-339.

JN Injury/Trauma, Accident
OANBB Brain, Central, Nervous System, Anatomy/
Body, Biomedical Aspect
YEF Data Statistics, Contents, Program-Report
Type
SCE Costs/ Benefits, Economics, Socioeconomic
Aspect

1000 brain injury cases analyzed from the insurance records. Type of injury and etiology tabulated. Category of compensation, neurologic, psychologic and vegetative problems are tabulated as a function of the location of the injury. Systolic and diastolic blood pressure values in age categories compared to "normal" values. Frequency and timing (after injury) of spasms given by location of injury. Occupation before and after accident shown, allowing for some economic analysis.

11-4540 S
Echlin, F. A./ Sordillo, S. V. R./ Garvey, T. Q., Jr.

ACUTE, SUBACUTE, AND CHRONIC SUBDURAL
HEMATOMA.

New York Univ.-Bellevue Medical Center, Dept. of
Neurosurgery. 4 Aug. 1956. 6 p. figs. ref.
American Medical Association Journal, Vol. 161, No. 14,
4 Aug. 1956, pp. 1345-1350.

JN Injury/Trauma, Accident
JNK Hemorrhage
OAI Head, Anatomy/ Body, Biomedical Aspect
OANBB Brain, Central, Nervous System
YEF Data Statistics, Contents, Program-Report
Type
WSC Diagnosis, Medical, Methods
WSD Surgery

Discussion of 300 cases. Defines concept of sub-acute condition-surgery on 7th to 21st day after injury. Mortality rates given in each group. Spinal fluid, X-ray and surgical findings for all diagnostic problems, and causes of death discussed.

12-2592 S
TRAFFIC INJURY IN BRISBANE. Report of a general
survey. See 01-2592 S

12-3702 S
Pate, J. W./ Wilson, H.
ARTERIAL INJURIES OF THE BASE OF THE NECK.
Tennessee Univ. 1964. 3 p. ref. tables, figs.
Archives of Surgery, Vol. 89, Dec. 1964, pp. 1106-1110.
Conference: American College of Surgeons, Tennessee
Chapter, 14 April 1964, Memphis.

JNG Laceration/Openwound, Injury/Trauma,
Accident
YEF Data Statistics, Contents, Study-Report Type
OAKCB Arteries, Blood Vessels, Cardiovascular System,
Anatomy/Body, Biomedical Aspect

In 21 patients over a 12-year period, arterial injuries at the base of neck were associated with 20% mortality from uncontrolled hemorrhage and cerebral ischemia. Describes incisions to be made during surgery in injuries to carotid, innominate, and subclavian arteries.

12-3713 S
EINE ANALYSE VON 827 UNFALLTODESFÄLLEN.
[AN ANALYSIS OF 827 CASES OF FATAL ACCI-
DENTS.] See 24-3713 S

12-3728 S
AUTOPSY FINDINGS IN 127 PATIENTS FOLLOWING
FATAL TRAFFIC ACCIDENTS. See 22-3728 S

12-3771 N
Drompp, B. W./ Grimes, A.
EMERGENCY MANAGEMENT OF CERVICAL SPINE
INJURIES.
Arkansas Univ. Medical Center, Div. of Orthopedic
Surgery. Sept. 1963. 6 p. photos, ref.
Arkansas Medical Society Journal, Vol. 60, No. 4, Sept.
1963, pp. 129-134.

JN Injury/Trauma, Accident

OANBC Spinal Cord, Central, Nervous System, Anatomy/Body, Biomedical Aspect
WSC Diagnosis, Medical, Methods
WSE Therapeutic
YCK Case Studies, Nature of Study, Study-Report Type

Authors outline method of evaluation and care of neck injuries with fracture or fracture-dislocation, and describe signs of fracture in comatose and conscious patients. Four cases are used for illustration.

12-3782 N

Guttmann, L.
SOME PROBLEMS IN THE INITIAL MANAGEMENT OF SPINAL CORD INJURIES.

National Spinal Injuries Centre, Stoke Mandeville Hospital, Aylesbury (England). Jan. 1964. 3 p. figs. ref.
Physiotherapy, Vol. 50, Jan. 1964, pp. 10-14.

WSE Therapeutic, Medical, Methods
WSB First Aid
OANBC Spinal Cord, Central, Nervous System, Anatomy/Body, Biomedical Aspect

Director describes treatment employed at National Spinal Injuries Centre in England, including physiotherapy and electrotherapy. Gives essential points in first aid for patients with suspected spinal fracture. Lists symptoms of respiratory difficulties.

12-3803 N

Sandor, F.
DIAPHRAGMATIC RESPIRATION: A sign of cervical cord lesion in the unconscious patient ("horizontal paradox").
19 Feb. 1966. 2 p. figs. ref.
British Medical Journal, Vol. 1, 19 Feb. 1966, pp. 465-466.
Sponsor: Newcastle Regional Hospital Board (England).

OANBC Spinal Cord, Central, Nervous System, Anatomy/Body, Biomedical Aspect
OALF Diaphragm, Respiratory System
YCK Case Studies, Nature of Study, Study-Report Type

Describes how observing type of respiration allowed correct diagnosis of cervical-cord damage in two unconscious patients. Suggests that diaphragmatic respiration be looked for in patients with severe head injuries, especially vertical fractures of skull.

12-3839 N

Harris, H. H./ Ainsworth, J. Z.
IMMEDIATE MANAGEMENT OF LARYNGEAL AND TRACHEAL INJURIES.
Baylor Univ., College of Medicine, Dept. of Oto-laryngology, Houston, Texas. July 1965. 13 p. figs. tables. ref.
Laryngoscope, Vol. 75, July 1965, pp. 1103-1115.
Conference: American Laryngological, Rhinological and Otological Society, Inc., Southern Section, 15 Jan. 1965, Charleston, South Carolina.

OALC Larynx, Respiratory System, Anatomy/Body, Biomedical Aspect

OALD Trachea/Bronchi
JNG Laceration/Openwound, Injury/Trauma, Accident
JNE Contusion/Crushing
WSD Surgery, Medical, Methods
YCK Case Studies, Nature of Study, Study-Report Type

Review 22 cases of acute injury, with a detailed description of treatment, types of airways, and voices which resulted. Tracheotomy is said to be necessary with subcutaneous emphysema or laryngeal obstruction. Although internal splinting or skin graft was not used for stab wounds, no strictures developed. For other injuries, value of open reduction with replacement of cartilage, suturing of internal lacerations, internal splinting with split thickness graft, and wire fixation is stressed.

12-3843 S

Hass, A./ Lowman, E. W./ Bergofsky, E. H.
IMPAIRMENT OF RESPIRATION AFTER SPINAL CORD INJURY.
New York Univ. School of Medicine, Dept. of Physical Medicine and Rehabilitation. June 1965. 4 p. tables. figs. ref.
Archives of Physical Medicine and Rehabilitation, Vol. 46, June 1965, pp. 399-405.
Grant No: RT-1/ U-1249.
Sponsor: Dept. of Health, Education and Welfare, Vocational Rehabilitation Administration, Washington, D.C./ New York City Health Research Council.

JN Injury/Trauma, Accident
OAL Respiratory System
OANBC Spinal Cord, Central, Nervous System, Anatomy/Body, Biomedical Aspect
YEF Data Statistics, Contents, Study-Report Type

Assessment of respiratory performance in 31 male patients with spinal-cord injury; tables include average values of pulmonary-function studies, and pulmonary gas exchange. Respiratory insufficiency develops months after injury due to dysfunction of thorax rather than to intrinsic lung disease. Ventilation is worsened by sitting position, but not by application of braces.

12-3882 S

THE PATHOLOGY OF PEDESTRIAN AUTOMOTIVE ACCIDENT VICTIMS. See 21-3882 S

12-3911 S

Holinger, P. H./ Curtin, J. W.
AUTOMOBILE ACCIDENTS AND LARYNGEAL AND UPPER TRACHEAL TRAUMA.
Presbyterian-St. Luke's Hospital/ Illinois Univ., College of Medicine. April 1964. 4 p. figs. table. ref.
Presbyterian-St. Luke's Hospital Chicago Medical Bulletin, Vol. 3, April 1964, pp. 46-52.

JN Injury/Trauma, Accident
OALD Trachea/Bronchi, Respiratory System, Anatomy/Body, Biomedical Aspect
VN Epidemiology, Disciplines
WSE Therapeutic, Medical, Methods

Discusses 34 patients with laryngeal trauma, 28 from automobile accidents. Of the 28 tracheotomy patients,

BIBLIOGRAPHY

15 required extensive external laryngeal or cervical trachea reconstruction because of stenosis or atresia. Techniques of reconstruction are discussed in detail.

12-3959 S

Rossier, A./ Brunner, U.
ZUR INITIALEN BEHANDLUNG DER FRISCHEN TRAUMATISCHEN QUERSCHNITTLÄSION. [ON THE INITIAL TREATMENT OF ACUTE TRAUMATIC SPINAL CORD INJURIES.]
Chirurgischen Universitätsklinik B, Zürich (Germany). 1964. 9 p. tables. ref.
Schweizerische Medizinische Wochenschrift, Vol. 94, 7 March 1964, pp. 362-370.

OANBC Spinal Cord, Central, Nervous System, Anatomy/Body, Biomedical Aspect
JN Injury/Trauma, Accident
WSE Therapeutic, Medical, Methods
WSC Diagnosis
OALE Lungs, Respiratory System
JNP Consequences/Complications
YEF Data Statistics, Contents, Study-Report Type

The management of patients with acute spinal cord injuries is discussed. Repeated neurological tests are important. A review of the indications for early laminectomy is followed by a discussion of the treatment for paralysis of bladder and bowel, physiotherapeutic measures and the correction of metabolic disorders in the initial stages of paraplegia. Authors noted high rate of pulmonary embolisms. Pathogenesis and prophylaxis of deep venous thrombosis in traumatic spinal cord injuries are discussed.

12-4001 S

Jones, M. D.
CERVICAL SPINE CINERADIOGRAPHY AFTER TRAFFIC ACCIDENTS.
California Univ. Medical School, Dept. of Radiology, Dec. 1962. 4 p. tables. figs. ref.
Archives of Surgery, Vol. 85, Dec. 1962, pp. 974-981.

JN Injury/Trauma, Accident
OAOBB Vertebrae/Spine, Bones, Musculo-Skeletal System, Anatomy/Body, Biomedical Aspect
YEF Data Statistics, Contents, Study-Report Type
WSC Diagnosis, Medical, Methods
WSE Therapeutic
JNW Whiplash

Author reviews the literature with respect to cervical spine syndromes. Discusses mode of injury, mechanism of injury, incidence of abnormal findings and symptomatology. After cineradiographic studies of 61 patients, concludes that this method complements static X-ray studies and is most valuable in detecting abnormal function. Data statistics: distribution of patients in hyperextension and hyperflexion accidents; symptoms following hyperextension and hyperflexion accidents; comparison of original and second interpretations of cineradiographs; abnormalities seen in cineradiographs and plain X rays; results of last cineradiographic examination.

12-4006 S

Fitz-Hugh, G. S./ Wallenborn, W. M./ McGovern, F.

INJURIES OF THE LARYNX AND CERVICAL TRAUMA.

Virginia Univ. Hospital, Dept. of Otolaryngology, Charlottesville. June 1962. 13 p. tables. figs. ref.
Annals of Otolaryngology, Rhinology and Laryngology, Vol. 71, June 1962, pp. 419-442.

OAOBB Vertebrae/Spine, Bones, Musculo-Skeletal System, Anatomy/Body, Biomedical Aspect
OALC Larynx, Respiratory System
JN Injury/Trauma, Accident
VN Epidemiology/Etiology, Disciplines
YEF Data Statistics, Contents, Study-Report Type
YCK Case Studies, Nature of Study

Authors survey 28 cases and review literature, discussing incidence, etiology, diagnosis and treatment. Describe management of closed and open injuries. Tabulate age, type of injury, etiology, symptoms, treatment, result and associated injuries for each case giving 7 illustrative case reports.

12-4039 S

Burke, M. H./ Hicks, A. F./ Robins, M./ Kessler, H.
SURVIVAL OF PATIENTS WITH INJURIES OF THE SPINAL CORD.
Veterans Administration, Dept. of Medicine and Surgery, Washington, D.C. 9 Jan. 1960. 4 p. figs. tables. ref.
American Medical Association. Journal, Vol. 172, No. 2, 9 Jan. 1960, pp. 121-124.

JN Injury/Trauma, Accident
OANBC Spinal Cord, Central, Nervous System, Anatomy/Body, Biomedical Aspect
JNP Consequences/Complications
YEF Data Statistics, Contents, Study-Report Type

Life table technique was used to compare longevity of 5,575 paraplegic or quadriplegic patients with that of the general population. All patients were treated in one Veterans Administration hospital in the course of a ten-year period ending in 1955. During first year after injury patients had mortality five to ten times higher than that of patients who survived first year. Of patients under 35 at time of injury, 80% were likely to survive for at least 10 years. Disparity of life expectancy between injured and normal people increases in older age groups.

12-4104 S

THE MANAGEMENT OF SKELETAL FRACTURES IN THE PATIENT WITH A HEAD INJURY. See 11-4104 S

12-4105 N

Fletcher, B. D./ Brogdon, B. G.
SEAT-BELT FRACTURES OF THE SPINE AND STERNUM.
Johns Hopkins Hospital, Dept. of Radiology, Baltimore, Maryland. 10 April 1967. 2 p. ref.
American Medical Association. Journal, Vol. 200, No. 2, 10 April 1967, pp. 167-168.

JNH Fracture, Injury/Trauma, Accident
DMDB Seat Belts, Restraint Systems, Auxiliaries/Accessories, Vehicle
OAOBB Vertebrae/ Spine, Bones, Musculo-Skeletal System, Anatomy/Body, Biomedical Aspect
OAF Thorax

YCK Case Studies, Nature of Study, Study-Report Type

Report is made on two cases. An improperly positioned or inadequately tightened lap belt may act as a fulcrum to produce transverse fractures of lumbar vertebrae. References are made to other cases. Frequency of such injury is low.

12-4116 N

Saldeen, T.
FATAL NECK INJURIES CAUSED BY USE OF DIAGONAL SAFETY BELTS.
Lund Univ., Dept. of Forensic Medicine (Sweden). 1967. 7 p. figs. ref.
Journal of Trauma, Vol. 7, No. 6, 1967, pp. 856-862.

JNB Fatal, Injury/Trauma, Accident
OAH Neck, Anatomy/ Body, Biomedical Aspect
JKB Ejection, Accident Hazards
DMDC Shoulder Harnesses, Restraint Systems, Auxiliaries/ Accessories, Vehicle
JNO Dismemberment/ Decapitation

Three case reports. All victims were ejected from the car, with decapitation or fracture of the cervical vertebrae. Author concludes that these cases reflect the risk involved with the combination of inadequate car-door locks and a diagonal belt used without a lap belt.

12-4117 S

Lausberg, G.
DIFFERENTIALTHERAPEUTISCHE EROERTERUNGEN BEI RUECKENMARKS-UND CAUDAVERLETZUNGEN. [DIFFERENTIAL THERAPEUTIC DISCUSSIONS ON SPINAL CORD AND CAUDAL INJURIES.]
Giessen Univ., Neurosurgical Dept. (Germany). 17 June 1966. 6 p. table. figs. ref.
Deutsche Medizinische Wochenschrift, Vol. 91, 17 June 1966, pp. 1109-14.

WSE Therapeutic, Medical, Methods
JN Injury/ Trauma, Accident
OANBC Spinal Cord, Central, Nervous System, Anatomy/ Body, Biomedical Aspect

Author discusses conservative treatment as compared to surgery and, based on his own series of 70 cases, recommends conservative treatment. Indication for laminectomy given by restriction to the passage of fluid rather than by the X-ray measurement of the restriction. Table shows relationship between restriction and mortality for cervical spine, dorsal and lumbar and caudal injury, and the complete or incomplete "cross-section" syndrome. Unsuccessful procedures are discussed. Case reports are included.

12-4119 S

FATAL TRAFFIC ACCIDENTS IN BRISBANE FROM 1935 TO 1964. See 21-4119 S

12-4150 N

Curtin, J. W./ Holinger, P. H./ Greeley, P. W.
BLUNT TRAUMA TO THE LARYNX AND UPPER TRACHEA: Immediate treatment, complications and late reconstructive procedures.

Illinois Univ., Chicago, College of Medicine, Dept. of Surgery/ Illinois Univ., Chicago, College of Medicine, Dept. of Otolaryngology/ Presbyterian-St. Luke's Hospital, Chicago, Illinois/ Illinois Univ., Chicago, Research and Educational Hospitals. 1966. 6 p. photos. ref.

Journal of Trauma, Vol. 6, No. 4, July 1966, pp. 493-502.

Conference: American Association for the Surgery of Trauma, 25th annual, 14-16 Oct. 1965, Philadelphia, Pennsylvania.

JNE Contusion/ Crushing/ Blunt, Injury/ Trauma, Accident
OALC Larynx, Respiratory System, Anatomy/ Body, Biomedical Aspect
OALD Trachea/ Bronchi
WSD Surgery, Medical, Methods

Authors also discuss incidence and cause of injury. Describe general management and operative procedures in some detail.

12-4159 N

Haller, J. A., Jr.
BULLET TRANSECTION OF BOTH COMMON CAROTID ARTERIES WITH IMMEDIATE REPAIR AND SURVIVAL.
Louisville Univ., Dept. of Surgery, Kentucky. May 1962. 2 p. figs. ref.
American Journal of Surgery, Vol. 103, May 1962, pp. 532-535.

JNG Laceration/ Openwound/ Penetrating, Injury/ Trauma, Accident
OAKC Blood Vessels, Cardiovascular System, Anatomy/ Body, Biomedical Aspect
NKFF Delay, Frequency/ Time, Operating Conditions, Physical Aspect
WSD Surgery, Medical, Methods

Patient showed no neurologic deficit. Author discusses possible explanations. Emphasizes that a penetrating wound into an area of large vessels demands immediate exploration.

12-4167 N

Paterson, D. C.
THE EARLY DIAGNOSIS OF CERVICAL CORD INJURIES.
Royal Adelaide Hospital, Paraplegic Unit (Australia). Aug. 1966. 4 p. ref. tables. figs.
Australian and New Zealand Journal of Surgery, Vol. 36, Aug. 1966, pp. 17-23.

WSC Diagnosis, Medical, Methods
OANBC Spinal Cord, Central, Nervous System, Anatomy/ Body, Biomedical Aspect
JN Injury/ Trauma, Accident
YCK Case Studies, Nature of Study, Study-Report Type
VN Epidemiology/ Etiology, Disciplines

Author describes 3 patients with multiple injuries in which signs of cervical injuries were overlooked initially, resulting in quadriplegia in one case. Describes mechanism of injury, clinical features, use of X ray in diagnosis. Emphasizes that diagnosis must be at least tentative in the emergency room if the patient is to receive proper treatment.

12-4337 S

ROAD ACCIDENTS. See 03-4337 S

12-4514 S

Kimura, M.

ON THE TREATMENT OF SPINAL CORD INJURY:
Review and analysis of 2300 cases.Tohoku Labour Accident Hospital, Orthopaedic Dept.,
Sendai (Japan). March 1964. 8 p. fig. photos. ref. tables.
Japanese Orthopaedic Association Journal, Vol. 37,
March 1964, pp. 987-999.Conference: Japanese Accident Medical Association,
10th, Oct. 1962.

WSE Therapeutic, Medical, Methods

OANBC Spinal Cord, Central, Nervous System,
Anatomy/ Body, Biomedical Aspect

JN Injury/ Trauma, Accident

YEF Data Statistics, Contents, Study-Report Type

NKFF Delay, Frequency/ Time, Operating Conditions,
Physical Aspect

WSD Surgery

Operations were performed in 531 cases. Author emphasizes that the final step of treatment is rehabilitation. Describes and discusses general principles of management. Describes surgical methods. Data statistics: fixation, reduction and/or laminectomy; type of injury related to interval from injury to operation, results, and operative findings.

12-4515 S

Freed, M. M./ Bakst, H. J./ Barrie, D. L.

LIFE EXPECTANCY, SURVIVAL RATES, AND
CAUSES OF DEATH IN CIVILIAN PATIENTS WITH
SPINAL CORD TRAUMA.Boston Univ. School of Medicine, Massachusetts. July
1966. 4 p. ref. tables.*Archives of Physical Medicine and Rehabilitation*, Vol.
47, July 1966, pp. 457-463.Conference: American Congress of Physical Medicine and
Rehabilitation, 43rd annual, 24 Aug. 1965, Philadelphia,
Pennsylvania.

JN Injury/ Trauma, Accident

NKFF Delay, Frequency/ Time, Operating Conditions,
Physical AspectOANBC Spinal Cord, Central, Nervous System,
Anatomy/ Body, Biomedical Aspect

JNP Consequences/ Complications

YEF Data Statistics, Contents, Study-Report Type

243 cases with permanent neurological impairment. Authors discuss and describe causes of death in this and other series. Suggest that findings are of immediate significance for those involved in the care of this type of patient. Data statistics: occupation, mortality; age at the time of injury; cause of death and relation to cord injury; survival time; cardiac arrest and time of operation.

12-4538 N

Kuhlendahl, H.

DIE NEUROLOGISCHEN SYNDROME BEI DER
ÜBERSTRECKUNGSVERLETZUNG DER HALSWIR-
BELSÄULE UND DEM SOG. SCHLEUDERTRAUMA.
[THE NEUROLOGICAL SYNDROMES IN INJURIES
CAUSING HYPER-EXTENSION OF THE CERVICALSPINE AND THE SO-CALLED WHIPLASH INJURY].
29 May 1964. 6 p. ref.*Munchener Medizinische Wochenschrift*, Vol. 106, 29
May 1964, pp. 1025-1030.

JNW Whiplash, Injury/ Trauma, Accident

YCK Case Studies, Nature of Program, Program-Report Type

WSC Diagnosis, Medical, Methods

Four case reports. Diagnostic problems discussed.

13-2592 S

TRAFFIC INJURY IN BRISBANE. Report of a general
survey. See 01-2592 S

13-3712 S

Ransdell, H. T., Jr.

TREATMENT OF FLAIL CHEST INJURIES WITH A
PISTON RESPIRATOR.Louisville Univ. School of Medicine, Dept. of Surgery,
Kentucky. 1965. 5 p. ref. tables.*Journal of Trauma*, Vol. 5, No. 3, 1965, pp. 412-420.Conference: American Association of the Surgery of
Trauma, 24th annual, 1-3 Oct. 1964, Chicago, Illinois.

OAF Thorax, Anatomy/Body, Biomedical Aspect

JRG Treatment/Care, Recovery of Injured, Accident

NKF Frequency/Time

XTI Resuscitators

YEF Data Statistics, Contents, Study-Report Type

Compares two groups of patients during two different time periods admitted to hospital with flail chest injuries, largely resulting from automobile accidents. Thirty-nine treated with traditional therapy, 47 with piston respirator. There was 25% reduction in mortality in piston respirator group. "Stiff lung" syndrome, or congestive atelectasis, did not occur in any patient placed on piston respirator in initial treatment. Tracheitis and Staphylococcus pneumonia are replacing "stiff lung" syndrome as major causes of death.

13-3713 S

EINE ANALYSE VON 827 UNFALLTODESFÄLLEN.
[AN ANALYSIS OF 827 CASES OF FATAL ACCI-
DENTS.] See 24-3713 S

13-3723 S

Solheim, K.

CLOSED THORACIC INJURIES.

Uppsala Univ., Dept. of Pathology (Sweden). 1963. 5 p.
tables. figs. ref.*Acta Chirurgica Scandinavica*, Vol. 126, 1963, pp.
549-557.Sponsor: Norges Almenvitenskapelige Forskningsrad,
Sweden.Conference: Norwegian Surgical Association, 3 Nov.
1962, Oslo, Norway.

OAF Thorax, Anatomy/Body, Biomedical Aspect

JNE Contusion/Crushing, Injury/Trauma, Accident

EA Age, People

EF Sex

JNX Multiple Severe Injuries

WSC Diagnosis, Medical, Methods

OALF Diaphragm, Respiratory Systems

BIBLIOGRAPHY

Analyses 139 Oslo patients who arrived alive at hospital during ten-year period. Source of injury, frequency, treatment, and results are tabulated for 65 patients with pneumothorax. Pleural suction and exsufflation are usually adequate treatment of pneumothorax if correct diagnosis is made in time. All 64 patients who had hemothorax alone were treated with thoracocentesis. Some of the 44 fatalities in this group involved intrathoracic injuries. Review of literature. Stresses that because of high mortality, thoracic injuries should be given priority in patients with multiple injuries. "Wet-lung" condition is described.

13-3753 N

Sperling, E.

BEITRAG ZUR TRAUMATISCHEN BRONCHUSRUPTUR. [CONTRIBUTION TO TRAUMATIC BRONCHIAL RUPTURES.]

Chirurgischen Universitätsklinik der Charité Berlin (Germany). Jan. 1964. 8 p. illus. tables. ref. *Chirurg*, Vol. 35, Jan. 1964, pp. 3-10.

JNG Laceration/Openwound, Injury/Trauma, Accident
OALD Trachea/Bronchi, Respiratory System, Anatomy/Body, Biomedical Aspect
YCC State-of-the-Art, Nature of Study, Study-Report Type
YCK Case Studies
WSD Surgery, Medical, Methods
OAF Thorax

Rupture of bronchi is rare and generally associated with blunt chest trauma. After a state-of-the-art report, author discusses case studies in detail, indicating bronchus-anastomosis as the best therapy.

13-3767 S

TODESURSACHEN BEI FRISCHEN THORAXVERLETZUNGEN. [DEATH CAUSES IN RECENT THORACIC INJURIES.] See 23-3767 S

13-3781 N

Reams, G. B.

A SIMPLIFIED TREATMENT OF PNEUMOTHORAX IN A MASS CASUALTY SITUATION.

Air Force Hospital Keesler, Keesler AFB, Mississippi. June 1963. 2 p. figs. ref. *Military Medicine*, Vol. 128, June 1963, pp. 543-544.

WSE Therapeutic, Medical, Methods
OAF Thorax, Anatomy/Body, Biomedical Aspect
OALE Lungs, Respiratory System

Thermonuclear injuries are considered to include low-velocity missile wounds of the chest. A kit of equipment was developed for therapy of pneumo-thorax; its contents and use are described.

13-3783 N

Joynt, G. H. C.

NONPENETRATING CHEST TRAUMA IN ADULTS.

Toronto Western Hospital/ Toronto Univ. (Canada). June 1964. 5 p. ref. *Geriatrics*, Vol. 19, June 1964, pp. 407-414.

OAF Thorax, Anatomy/Body, Biomedical Aspect
JNE Contusion/Crushing, Injury/Trauma, Accident
EEC Adults, Old Aged
YCC State-of-the-Art, Nature of Study, Study-Report Type
WSE Therapeutic, Medical, Methods

Discusses management of blunt chest trauma, including prevention of respiratory and circulatory failure, techniques of emergency handling of patient prior to arrival at hospital, and special treatment required by fractures of ribs, pneumothorax, hemothorax, flail chest, fractures of sternum, tears of trachea or main bronchus, traumatic rupture of diaphragm, and damage of heart and great vessels. Studies comparing mortality rates for penetrating and blunt chest injuries are cited.

13-3784 N

THE MANAGEMENT OF HEAD INJURIES COMPLICATED BY MAJOR EXTRACRANIAL TRAUMA. See 11-3784 N

13-3794 S

Garzon, A. A./ Becker, W. H./ Lyons, H. A./ Karlson, K. E.

EFFECT OF CHEST TRAUMA UPON RESPIRATORY FUNCTION.

New York State Univ. College of Medicine, Dept. of Surgery, Brooklyn/ New York State Univ. College of Medicine, Dept. of Medicine, Brooklyn. 1965. 4 p. fig. ref.

Journal of Trauma, Vol. 5, No. 3, 1965, pp. 404-411.

Conference: American Association for the Surgery of Trauma, 24th annual, 1-3 Oct. 1964, Chicago, Illinois.

OAF Thorax, Anatomy/Body, Biomedical Aspect
JN Injury/Trauma, Accident
YEG Tables/Graphs, Contents, Study-Report Type
OAFD Ribs

Ten patients with one or two fractured ribs were treated by intercostal procaine nerve block or adhesive strapping. Five patients with multiple unilateral rib fractures were treated by intercostal nerve block, and five with traumatic hemothorax or pneumothorax by closed thoracostomy tube drainage of the pleural space. In first ten patients, acute arterial oxygen desaturation was present, and vital capacity and maximal voluntary ventilation were reduced. Patients with acute traumatic collapse of the lung showed arterial oxygen desaturation, reduced minimum ventilation, and decreased vital capacity. Pulmonary compliance, resistance and work in patients with multiple unilateral rib fractures appeared to be minimally affected by trauma.

13-3798 S

Conn, J. H./ Hardy, J. D./ Fain, W. R./ Netterville, R. E.

THORACIC TRAUMA: Analysis of 1022 cases.

Veterans Administration Center, Dept. of Surgery, Jackson, Mississippi/ Mississippi Univ. Medical Center, Dept. of Surgery, Jackson. 1963. 10 p. figs. ref. tables. *Journal of Trauma*, Vol. 3, 1963, pp. 22-40.

Conference: American Association for the Surgery of Trauma, 21st annual, 28-30 Sept. 1961, Chicago, Illinois.

JNG Laceration/Openwound, Injury/Trauma, Accident

BIBLIOGRAPHY

JNE Contusion/Crushing
OAF Thorax, Anatomy/Body, Biomedical Aspect
OAK Cardiovascular System
OAL Respiratory System
VN Epidemiology, Disciplines
EA Age, People
YEF Data Statistics, Contents, Study-Report Type

Over 14-year period, 385 patients had penetrating and 637 had nonpenetrating injuries. Mortality is related to causes of injury and shock on admission. Frequency and management of hemothorax, pneumothorax, rib fractures, flail chest, and tracheoesophageal, diaphragmatic, tracheobronchial, cardiovascular, and associated injuries are discussed. Common avoidable errors in management are discussed.

13-3835 N

AGRICULTURAL TRACTOR ACCIDENTS: A description of 14 tractor accidents and a comparison with road traffic accidents. See 18-3835 N

13-3836 N

McClenathan, J. E./ Brettschneider, L.
TRAUMATIC THORACIC AORTIC ANEURYSMS.
National Naval Medical Center, Naval Hospital, Dept. of Thoracic Surgery, Bethesda, Maryland. July 1965. 9 p. figs. tables. ref.
Journal of Thoracic and Cardiovascular Surgery, Vol. 50, No. 1, July 1965, pp. 74-82.

OAKC Blood Vessels, Cardiovascular System, Anatomy/Body, Biomedical Aspect
JN Injury/Trauma, Accident
YCD Survey, Nature of Study, Study-Report Type
L Time
WSD Surgery, Medical, Methods
WSI Autopsy

Report reviews series of 14 cases, all with blunt deceleration injuries inflicted from 18 days to 11 years before surgery. Traumatic thoracic aortic rupture should be suspected in every case of horizontal deceleration chest injury with mediastinal widening. Reviews controversy in literature as to whether surgery should be employed for acute and chronic traumatic thoracic aneurysms. Partial left heart bypass and hypothermia are recommended.

13-3841 S

Lloyd, J. W./ Smith, A. C./ O'Connor, B. T.
CLASSIFICATION OF CHEST INJURIES AS AN AID TO TREATMENT.
Radcliffe Infirmary, Nuffield Dept. of Anaesthetics, Oxford (England)/ Radcliffe Infirmary, Accident Service, Oxford (England). 12 June 1965. 6 p. figs. table. ref.
British Medical Journal, Vol. 1, 12 June 1965, pp. 1518-1523.

JNE Contusion/Crushing, Injury/Trauma, Accident
WSE Therapeutic, Medical, Methods
OAF Thorax, Anatomy/Body, Biomedical Aspect
OAL Respiratory System
JNX Multiple Severe Injuries
YCK Case Studies, Nature of Study, Study-Report Type
OAI Head
JNH Fracture

Describes treatment of 121 patients, 33 of whom required intermittent positive-pressure respiration (IPPR). Patients should be classified by ventilatory capacity, not anatomical extent of injury. Mild injury should be treated by pain relief alone. Moderate injury may require tracheostomy. Measurements of pH, Pco₂ and Po₂ indicate whether IPPR is required. Six case reports are presented.

13-3859 N

Constantinescu, O.
A NEW METHOD OF TREATING THE FLAIL CHEST WALL.
May 1965. 7 p. figs. ref.
American Journal of Surgery, Vol. 109, May 1965, pp. 604-610.

WSE Therapeutic, Medical, Methods
OAF Thorax, Anatomy/Body, Biomedical Aspect
OAFD Ribs
OAL Respiratory System

Provides state-of-the-art report for treatment of injury to rib panel, describing the author's "anchor" type hook used to secure external plastic panel. Conditions for correct treatment of rib panel are given. Case reports are briefly cited for bilateral anterior sternocostal panels, anterolateral hemipanel, anterolateral and lateral panels, and posterior and posterolateral panels. Author finds apparatus is readily applicable and does not incur trauma, hazards, or complications.

13-3864 S

Reid, J. M./ Baird, W. L. M.
CRUSHED CHEST INJURY: Some physiological disturbances and their correction.
Glasgow Royal Infirmary, Univ. Dept. of Anaesthetics (Scotland). 24 April 1965. 5 p. tables. figs. ref.
British Medical Journal, Vol. 1, 24 April 1965, pp. 1105-1109.

OAF Thorax, Anatomy/Body, Biomedical Aspect
OAFD Ribs
JNH Fracture, Injury/Trauma, Accident
JNE Contusion/Crushing
OAL Respiratory System
OAK Cardiovascular System
YEF Data Statistics, Contents, Study-Report Type
L Time

Authors present 33 cases, describing 3 classes of injury by ability to maintain spontaneous respiration, type of treatment required, associated injuries, and state of consciousness. Age, pulmonary trauma on X ray, obstructive lung disease, head injury, bony thoracic injury, other injuries, renal or hepatic failure, tracheostomy, and survival are tabulated for each class.

13-3881 N

INJURY PRODUCED BY SEAT BELTS: Report of 2 cases. See 15-3881 N

13-3895 N

Alivisatos, C. N./ Bonellos, C. H./ Avlamis, G. P./ Sarris, M. C./ Romanos, A. N.
TRAUMATIC CLOSED RUPTURE OF THE DIAPHRAGM.

BIBLIOGRAPHY

Athens Univ., Propaedeutic Surgical Clinic (Greece). Oct. 1964. 4 p. ref.
Diseases of the Chest, Vol. 46, No. 4, Oct. 1964, pp. 435-440.

JNG Laceration/Openwound, Injury/Trauma, Accident
OALF Diaphragm, Respiratory System, Anatomy/Body, Biomedical Aspect
YCK Case Studies, Nature of Study, Study-Report Type

Four cases are described, three from nonpenetrating injury and one involving strangulation of stomach following esophagomyotomy. Two cases had large avulsion of sternocostal insertion of diaphragm. Rupture of diaphragm should be suspected after injury of trunk or operation of diaphragm on basis of clinical or radiological data relative to chest or epigastrium.

13-3907 S

Cato, F. L./ Norman, W. D.
TRAUMATIC HEMOTHORAX: An analysis of 276 cases. Louisiana State Univ., School of Medicine, Dept. of Surgery/ Louisiana State Univ. Surgical Service, Charity Hospital, New Orleans. 1940. 6 p. figs. ref.
Surgery, Vol. 7, 1940, pp. 848-859.

JNG Laceration/Openwound, Injury/Trauma, Accident
JNE Contusion/Crushing
OAF Thorax, Anatomy/Body, Biomedical Aspect
YEF Data Statistics, Contents, Study-Report Type
WSI Autopsy, Medical, Methods
WSC Diagnosis
JNK Hemorrhage
WSD Surgery

Cases of hemothorax following chest injuries have been analyzed with reference to incidence, symptomatology, diagnostic methods and therapeutic procedures. Cases were drawn from 1932 to 1936, and no DOA's were included in study.

13-3909 N

Hebert, W. M./ Schlessinger, E./ Lewis, R./ Samson, P. C.
A REGIMEN FOR THE EARLY CARE OF THE PATIENT WITH CRUSHED CHEST. Highland Alameda County Hospital, Oakland, California/ San Joaquin General Hospital, Stockton, California. May 1964. 8 p. photos. ref.
Journal of Trauma, Vol. 4, May 1964, pp. 325-338.
Conference: Stockton Surgical Society, 1 Aug. 1961.

L Time
OAF Thorax, Anatomy/Body, Biomedical Aspect
JNE Contusion/Crushing, Injury/Trauma, Accident
WSE Therapeutic, Medical, Methods
OAFD Ribs
JNH Fracture
OAL Respiratory System

Classification for crushing injuries of chest is given. Conservative therapy is recommended for relatively minor but potentially serious injuries. For serious injuries necessitating surgery or intensive care, immediate and definitive care is discussed as opposed to protracted therapy, emphasizing importance of tracheostomy care.

Thoracotomy and cardiac management are discussed. Organization of specialized teams for care of these patients is recommended.

13-3912 S

Garzon, A. A./ Amer, N. L./ Karlson, K. E.
TREATMENT OF PENETRATING WOUNDS OF THE CHEST. New York State Univ. College of Medicine, Brooklyn/ Kings County Hospital, New York. March 1964. 5 p. tables. ref.
Archives of Surgery, Vol. 88, March 1964, pp. 397-404.

JNG Laceration/Openwound, Injury/Trauma, Accident
OAF Thorax, Anatomy/Body, Biomedical Aspect
WSE Therapeutic, Medical, Methods
YEF Data Statistics, Contents, Study-Report Type
VN Epidemiology, Disciplines
WSD Surgery
JNK Hemorrhage

Reviews records of 301 consecutive patients admitted alive. Etiology of injury and age distribution are given. Cases are grouped by type of management; incidence of hypotension, length of hospitalization, amount of pleural drainage, indication for thoracotomy cases requiring laparotomy, associated injuries, and deaths are tabulated for each group. Experience of other authors is tabulated giving year, number of cases, total mortality, thoracic mortality, type of injury, incidence of thoracotomy, complications, and treatment.

13-3936 S

Göthman, B./ Högman, L.
CURRENT TREATMENT OF ACUTE THORACIC INJURIES. Centrallasarettet, Dept. of Surgery, Örebro (Sweden). 1964. 6 p. ref.
Acta Chirurgica Scandinavica, Vol. 127, 1964, pp. 609-618.

OAF Thorax, Anatomy/Body, Biomedical Aspect
WSE Therapeutic, Medical, Methods
JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
YEF Data Statistics, Contents, Study-Report Type
VN Epidemiology/Etiology, Disciplines
EA Age, People
JNX Multiple Severe Injuries
YCK Case Studies, Nature of Study

Brief state-of-the-art report on six year study of Swedish treatment of 219 cases of acute thoracic injury. Traffic accidents were responsible for about half of the cases. Mortality, age, sex, length of hospitalization, causation, associated injuries, and specific nature of thoracic injuries are tabulated according to severity of injuries. Frequency of surgical procedures and other therapy for group with most severe injuries is discussed. Nine cases are presented in detail.

13-3999 N

Ker, H.
CLOSED TRAUMATIC RUPTURE OF THE DIAPHRAGM.

BIBLIOGRAPHY

Merthyr Hospital, Glamorgan (England)/ Aberdare Hospital, Glamorgan (England). 1963. 2 p. figs. ref.
British Journal of Surgery, Vol. 50, 1963, pp. 891-893.

- JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
- OALF Diaphragm, Respiratory System, Anatomy/Body, Biomedical Aspect
- YCK Case Studies, Nature of Study, Study-Report Type

Author gives 2 case reports and discusses problems in diagnosis and treatment.

13-4014 S
PATTERNS OF THORACIC INJURIES IN FATAL TRAFFIC ACCIDENTS. See 24-4014 S

13-4045 S
Cordice, J. W. V., Jr./ Cabezon, J.
CHEST TRAUMA WITH PNEUMOTHORAX AND HEMOTHORAX.
New York City Dept. of Hospitals, Harlem Hospital Center, Dept. of Surgery, New York. Sept. 1965. 12 p. tables. figs. ref.
Journal of Thoracic and Cardiovascular Surgery, Vol. 50, No. 3, Sept. 1965, pp. 316-338.
Sponsor: George H. Humphreys, II, New York.

- OAF Thorax, Anatomy/Body, Biomedical Aspect
- JNG Laceration/Openwound/Penetrating, Injury/Trauma, Accident
- JNE Contusion/Crushing/Blunt
- VN Epidemiology/Etiology, Disciplines
- JNX Multiple Severe Injuries
- YEF Data Statistics, Contents, Study-Report Type
- WSC Diagnosis, Medical, Methods
- WSD Surgery
- WSE Therapeutic
- OAL Respiratory System

Describes etiology, clinical characteristics, treatment, complications, and incidence of death for 432 cases of penetrating trauma and 70 cases of blunt trauma. Initial treatment is for shock and respiratory embarrassment. Indications for exploratory surgery are uncontrolled bleeding, cardiac tamponade, diaphragmatic penetration, penetration of esophagus, trachea, or major bronchus, and imbedded foreign body in "dangerous" region.

13-4056 N
Thomson, N. B., Jr.
THORACIC INJURIES IN CHILDREN.
Children's Hospital, Dept. of Cardiovascular Surgery, Buffalo, New York/ Buffalo Univ. School of Medicine, New York. 1962. 7 p. photos. ref.
Journal of Trauma, Vol. 2, 1962, pp. 76-88.

- JN Injury/Trauma, Accident
- OAF Thorax, Anatomy/Body, Biomedical Aspect
- EC Children, People
- WSBC Maintaining Airways, First Aid, Medical, Methods
- YCK Case Studies, Nature of Study, Study-Report Type
- OAL Respiratory System

Seven detailed case reports illustrate differences between responses of children and adults to thoracic trauma. Differences result from resiliency of child's thoracic cage, small lung capacity, lesser blood volume, and small airway. Gives principles in management of thoracic injuries in children.

13-4067 N
Kempf, F. K./ Deister, J.
THORAXVERLETZUNGEN: Ihre Komplikationen und Behandlung. [THORACIC INJURIES: Their complications and therapy.]
May 1964. 9 p. photos. ref.
Monatsschrift für Unfallheilkunde, Vol. 67, May 1964, pp. 185-200.

- JN Injury/Trauma, Accident
- OAF Thorax, Anatomy/Body, Biomedical Aspect
- JNP Consequences/Complications
- WSE Therapeutic, Medical, Methods
- VN Epidemiology/Etiology, Disciplines
- YCK Case Studies, Nature of Study, Study-Report Type

Automotive accidents represent over 50% of authors' cases. The incidence of associated injuries is very high. Difficulty of adequate diagnosis is pointed out. Six selected case reports demonstrate importance of correct, early diagnosis.

13-4072 S
Schramel, R./ Kellum, H./ Creech, O., Jr.
ANALYSIS OF FACTORS AFFECTING SURVIVAL AFTER CHEST INJURIES.
Tulane Univ. School of Medicine, Dept. of Surgery, New Orleans, Louisiana/ Charity Hospital, New Orleans, Louisiana. Nov. 1961. 4 p. tables. ref.
Journal of Trauma, Vol. 1, Nov. 1961, pp. 600-607.
Contract No: DA-49-007-MD-796.
Grant No: H-4429.
Conference: American Association for the Surgery of Trauma, 20th annual, 5-7 Oct. 1960, Coronado, California.

- YEF Data Statistics, Contents, Study-Report Type
- JNG Laceration/Openwound/Penetrating, Injury/Trauma, Accident
- JNE Contusion/Crushing/Blunt
- OAF Thorax, Anatomy/Body, Biomedical Aspect
- VN Epidemiology/Etiology, Disciplines

Analyze 265 cases over 5-year period, with mortality of 7% for penetrating and 28% for nonpenetrating injuries. In penetrating injuries, presence of wounds of heart and great vessels and correct assessment of injury are two major factors in survival. Age and associated injuries are major factors for nonpenetrating injuries.

13-4077 N
Jenny, R. H.
VERLETZUNGEN DES THORAKALEN ESOPHAGUS. [INJURIES OF THE THORACIC ESOPHAGUS.]
Wien Universität, Chirurgischen Klinik (Austria). Feb. 1960. 4 p. tables. figs.
Klinische Medizin, Vol. 15, Feb. 1960, pp. 86-92.

- JNG Laceration/Openwound/Penetrating, Injury/Trauma, Accident

BIBLIOGRAPHY

OAJI Esophagus, Digestive System/Alimentary Tract, Anatomy/Body, Biomedical Aspect

Brief state-of-the-art report with discussion of case reports. Rare event. Mortality 50%. Tabulation for 6 cases gives age, cause for admission, delay after occurrence, findings, therapy, and outcome.

13-4081 S

Humm, R.
A PROPOS DE 268 TRAUMATISMES THORACIQUES FERMES. [APROPOS OF 268 CLOSED CHEST INJURIES.]
9 Feb. 1963. 5 p.
Schweizerische Medizinische Wochenschrift, Vol. 93, 9 Feb. 1963, pp. 234-238.

JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
OAF Thorax, Anatomy/Body, Biomedical Aspect
JNP Consequences/Complications
WSE Therapeutic, Medical, Methods
OAL Respiratory System
YEF Data Statistics, Contents, Study-Report Type

The author presents statistical data on 268 cases of closed thoracic trauma observed over four and one half years at the University Surgical Clinic, Geneva. He distinguishes between trauma which did not involve a loose lateral area ("stove-in" chest) (92%), and that which produced a "stove-in" chest moving abnormally on respiration (8%). The frequency of multiple trauma is pointed out (34% presented skull trauma and 32% fractures of the limbs, the shoulder or pelvic girdles). Finally, the evolution of these cases as a group, with an analysis of the deaths (9%) and a description of treatment, with a particular reference to the use of the Engstrom machine, is reviewed.

13-4087 S

Rodewald, G./ Harms, H.
FUNKTIONELLE SPÄTERGEBNISSE NACH SCHWEREN BRUSTKORBTRAUMEN. [LATE SEQUELAE OF SEVERE CHEST INJURIES].
Hamburg Universität (Germany). 1965. 3 p. table. fig. ref.
Zentralblatt für Chirurgie, Vol. 90, 1965, pp. 1231-1235.

JNP Consequences/Complications, Injury/Trauma, Accident
JNX Multiple Severe Injuries
OAL Respiratory System, Anatomy/Body, Biomedical Aspects
OAF Thorax

Authors define severe chest injuries, and limit cases by exclusion of rare occurrences such as complete transection of lungs and injuries to the heart and great vessels. Follow-up investigations carried out on 19 patients about 2 to 3 years after the accident. Tabulation shows 4 ratings (severe, medium, light, and severe independent of accident) for immediate consequences, injury, clinical picture, follow-up examination: clinic observation, X ray, spirometry, blood gases, and ultimately the subjective appraisal of patient.

Discuss blood-gas analysis irregularities, point out consequences independent of adequate spirometric result.

13-4091 N

Schairer, E.
SPÄTRUPTUR DER SPEISERÖHRE NACH STUMPFEM TRAUMA. [LATE RUPTURE OF THE ESOPHAGUS AFTER BLUNT TRAUMA.]
Pathologisch-Histologischen Institut Ulm (Germany). 25 Dec. 1959. 3 p.
Medizinische Klinik, Vol. 54, 25 Dec. 1959, pp. 2327-2329.

JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
OAJI Esophagus, Digestive System/Alimentary Tract, Anatomy/Body, Biomedical Aspect
JNP Consequences/Complications
YCK Case Studies, Nature of Study, Study-Report Type

Literature survey. One case report. Rupture occurred three weeks after original trauma. Author presents hypothesis about the mechanism of rupture. Diagnosis discussed.

13-4119 S

FATAL TRAFFIC ACCIDENTS IN BRISBANE FROM 1935 TO 1964. See 21-4119 S

13-4125 S

Sherman, R. T.
EXPERIENCE WITH 472 CIVILIAN PENETRATING WOUNDS OF THE CHEST.
Tennessee Univ., Memphis, College of Medicine/ John Gaston Hospital, Memphis, Tennessee. Jan. 1966. 3 p. tables. ref.
Military Medicine, Vol. 131, Jan. 1966, pp. 63-67.

OAF Thorax, Anatomy/Body, Biomedical Aspect
JNG Laceration/ Openwound/ Penetrating, Injury/Trauma, Accident
VN Epidemiology/ Etiology, Disciplines
WSE Therapeutic, Medical, Methods
JNP Consequences/Complications

Author discusses etiology, management, late complications and results of treatment. Describes six major principles of treatment. Discusses data statistics: age, sex, race, and type of wound; etiology, results of tube thoracotomy and thoracentesis; late complications and mortality; type of treatment and mortality.

13-4129 N

Border, J. R./ Hopkinson, B. R./ Schenk, W. G.
MECHANISMS OF PULMONARY TRAUMA: An experimental study.
New York State Univ., Buffalo, Dept. of Surgery/ E. J. Meyer Memorial Hospital, Buffalo, New York. 1968. 9 p. tables. figs. ref.
Journal of Trauma, Vol. 8, No. 1, 1968, pp. 47-62.
Grant No: HE 03181.
Sponsor: National Heart Institute, Maryland/ United Health Foundation of Western New York.

OAL Respiratory System
JNE Contusion/Crushing/Blunt
YCG Laboratory Experiment

Authors describe a type of thoracoabdominal trauma

BIBLIOGRAPHY

without rib fractures. In patients with this injury initial X rays may be negative. Death from severe arterial hypoxia is not rare. This type of injury was simulated in dogs. Authors describe material and methods. Present and discuss findings. Postulate that atelectasis is initially present in the condition. Suggest possibility that the lesion could be prevented by early and continued re-inflation of the atelectatic lung.

13-4130 N

Epstein, L. I./ Lempke, R. E.
RUPTURE OF THE RIGHT HEMIDIAPHRAGM DUE TO BLUNT TRAUMA.
Indiana Univ., Indianapolis, Medical Center, Dept. of Surgery/ Veterans Administration Hospital, Indianapolis, Surgical Service. 1968. 6 p. ref. table, figs.
Journal of Trauma, Vol. 8, No. 1, 1968, pp. 19-28.

JNE Contusion/ Crushing/ Blunt, Injury/ Trauma, Accident
OALF Diaphragm, Respiratory System, Anatomy/ Body, Biomedical Aspect
YCK Case Studies, Nature of Study, Study-Report Type

Authors give 3 case reports and review 36 cases previously reported with respect to age, sex, agent, sensorium, associated injuries, time from injury to operation, symptoms at delayed operation, and result. Note the high incidence of associated injury to the pelvis, spine or brain. Note that the condition is often undiagnosed initially. Discuss the medical and non-medical consequences of a delay in diagnosis.

13-4160 S

Gray, A. R./ Harrison, W. H., Jr./ Couves, C. M./ Howard, J. M.
PENETRATING INJURIES TO THE CHEST: Clinical results in the management of 769 patients.
Nov. 1960. 4 p. charts. ref. tables.
American Journal of Surgery, Vol. 100, Nov. 1960, pp. 709-714.

JNG Laceration/ Openwound/ Penetrating, Injury/ Trauma, Accident
OAF Thorax, Anatomy/ Body, Biomedical Aspect
VN Epidemiology/ Etiology, Disciplines
YEF Data Statistics, Contents, Study-Report Type

Patients admitted to Grady Memorial Hospital, Atlanta. Authors describe general management in some detail. Present and analyze data. Note that mortality has decreased from 13% (1935) to 3.8% (1958). Data statistics: mortality; immediate complications; cause of injury; median hospital stay, type of treatment; nature of fatal injuries; hypotension on admission; shock unexplained by hemorrhage; associated injuries; empyema.

13-4161 S

Harrison, W. H., Jr./ Gray, A. R./ Couves, C. M./ Howard, J. M.
SEVERE NON-PENETRATING INJURIES TO THE CHEST: Clinical results in the management of 216 patients.
Nov. 1960. 5 p. charts. ref. tables.
American Journal of Surgery, Vol. 100, Nov. 1960, pp. 715-722.

WSE Therapeutic, Medical, Methods
JNE Contusion/ Crushing/ Blunt, Injury/ Trauma, Accident
OAF Thorax, Anatomy/ Body, Biomedical Aspect
VN Epidemiology/ Etiology, Disciplines
YEF Data Statistics, Contents, Study-Report Type

Patients admitted to Grady Memorial Hospital (Atlanta, Georgia). In general, method of treatment was most conservative possible. Authors present and discuss findings. Mortality rate was 7 percent. Data statistics: mortality and age; type of accident; number and location of injuries; complications; number of ribs fractured; shock; associated injuries; empyema. Tabulate, for 8 fatal cases: age; survival time, ribs fractured; pneumo- and hemothorax; shock; treatment.

13-4163 S

Johansson, L./ Silander, T.
TWENTY-ONE YEARS OF THORACIC INJURIES: A clinical study of 313 cases.
Karolinska Hospital, Thorax Clinic (Sweden). 1959. 12 p. figs. ref. tables.
Acta Chirurgica Scandinavica. Supplement, Vol. 245, 1959, pp. 91-112.

JNE Contusion/ Crushing/ Blunt, Injury/ Trauma, Accident
OAF Thorax, Anatomy/ Body, Biomedical Aspect
VN Epidemiology/ Etiology, Disciplines
YEF Data Statistics, Contents, Study-Report Type
OAFD Ribs
JNH Fracture
OAL Respiratory System

Authors analyze data. Describe and discuss symptoms, treatment, and results in cases with rib fractures, bronchial rupture, aortic aneurysm, traumatic myocardial injury, and penetrating heart and lung wounds. Data statistics: age; type of accident; annual distribution of thoracic fractures; distribution of rib fractures; distribution and combinations of injuries; type of thoracic injury. Four illustrative case histories.

13-4182 N

Taubert, E.
KLINIK UND FORSCHUNG; BEITRAG ZUR TRAUMATISCHEN ZWERCHFELLRUPTUR. [CONTRIBUTION TO TRAUMATIC RUPTURE OF THE DIAPHRAGM.]
Berlin Univ. Hospital, Surgery Dept. (Germany). Aug. 1965. 6 p. figs. photos. ref.
Chirurg, Vol. 36, Aug. 1965, pp. 337-342.

JNE Contusion/ Crushing/ Blunt, Injury/ Trauma, Accident
OALF Diaphragm, Respiratory System, Anatomy/ Body, Biomedical Aspect

Discussion of mechanism of injury. Prolapse of abdominal organs. X rays and case histories. Mortality low, usually affected by associated injuries. Maximum delay from occurrence to detection in Taubert's series is 17 years.

13-4337 S

ROAD ACCIDENTS. See 03-4337 S

13-4504 S
DIED IN HOSPITAL: A three-year study of deaths following trauma. See 21-4504 S

13-4513 S
ÜBER DIE RIPPENSERIENFRAKTUREN DURCH VERKEHRUNFÄLLE UND DEN DERZEITIGEN STAND IHRER BEHANDLUNG. [ON SERIAL RIB FRACTURES CAUSED BY TRAFFIC ACCIDENTS AND THE CURRENT STATUS OF THEIR TREATMENT.] See 24-4513 S

13-4518 S
Keller, J. W./ Meckstroth, C. V./ Sanzenbacher, L./ Pace, W. G.
THORACIC INJURIES DUE TO BLUNT TRAUMA.
Ohio State Univ. Hospitals, Dept. of Surgery, Columbus/ Ohio State Univ., College of Medicine, Columbus. 1967. 6 p. figs. ref.
Journal of Trauma, Vol. 7, No. 4, 1967, pp. 541-550.
Conference: American Association for the Surgery of Trauma, 26th annual, 6-8 Oct. 1966, Santa Barbara, California.

JNE Contusion/ Crushing/ Blunt, Injury/ Trauma, Accident
OAF Thorax, Anatomy/ Body, Biomedical Aspect
YEF Data Statistics, Contents, Study-Report Type
WSE Therapeutic, Medical, Methods

Clinical study of 188 cases of severe thoracic injury. Authors discuss incidence, type of thoracic injury, associated injuries, diagnosis and treatment. Conclude that death is most often due to severe extrathoracic injuries, but that untreated thoracic damage may increase the mortality rate. Emphasize necessity of prompt diagnosis and treatment. Data statistics: mortality; type of thoracic injury; and associated injuries.

13-4520 S
Stevens, E./ Templeton, A. W.
TRAUMATIC NONPENETRATING LUNG CONTUSION.
Missouri Univ., Medical Center, Dept. of Radiology, Columbus. Aug. 1965. 6 p. figs. table. ref.
Radiology, Vol. 85, Aug. 1965, pp. 247-252.

JNE Contusion/ Crushing/ Blunt, Injury/ Trauma, Accident
OALE Lungs, Respiratory System, Anatomy/ Body, Biomedical Aspect
YER General Discussions, Contents, Study-Report Type

Clinical study of 20 patients. Authors found poor correlation between X-ray and clinical findings. Discuss characteristic patterns, mechanism and course of injury. Data statistics: frequency of clinical findings; frequency of two parenchymal infiltrative patterns.

13-4526 S
Johansson, L./ Silander, T.
THORAXSKADOR I TRAFIKEN. [CHEST INJURIES IN TRAFFIC ACCIDENTS.]
8 Dec. 1965. 6 p. ref. figs. tables.
Lakartidningen, Vol. 62, 9 Dec. 1965, pp. 4114-4123.
Order No: STS 6331 (English translation).

JN Injury/ Trauma, Accident
OAF Thorax, Anatomy/ Body, Biomedical Aspect
VN Epidemiology/ Etiology, Disciplines
YEF Data Statistics, Contents, Study-Report Type
OAKC Blood Vessels, Cardiovascular System
OALF Diaphragm, Respiratory System
WSBCT Tracheostomy, Maintaining Airways, First Aid, Medical, Methods

Authors describe and discuss general principles of management. Discuss mechanisms of injury, diagnosis, and treatment of intrathoracic injuries. Analyze data from 395 cases. Data statistics: average hospital stay; percent of tracheotomies; percent of traffic accidents; sex; average age; number of broken ribs; sternal fractures; mortality; pleural complications.

14-3702 S
ARTERIAL INJURIES OF THE BASE OF THE NECK.
See 12-3702 S

14-3707 S
COMPLICATIONS ARTERIELLES DES TRAUMATISMES FERMÉS DES MEMBRES. Premier rapport. [ARTERIAL COMPLICATIONS OF CLOSED INJURIES TO LIMBS. First report.] See 17-3707 S

14-3708 S
THE MANAGEMENT OF CIVILIAN ARTERIAL INJURIES. See 17-3708 S

14-3713 S
EINE ANALYSE VON 827 UNFALLTODESFÄLLEN. [AN ANALYSIS OF 827 CASES OF FATAL ACCIDENTS.] See 24-3713 S

14-3716 N
Stoney, R. J./ Roe, B. B./ Redington, J. V.
RUPTURE OF THORACIC AORTA DUE TO CLOSED-CHEST TRAUMA.
California Univ. Medical Center, Dept. of Surgery. Nov. 1964. 4 p. figs.
Archives of Surgery, Vol. 89, Nov. 1964, pp. 840-847.
Conference: International Cardiovascular Society, 12th Scientific meeting, North American Chapter, 20 June 1964, San Francisco, California.

OAKC Blood Vessels, Cardiovascular System, Anatomy/Body, Biomedical Aspect
L Time
WSD Surgery, Medical, Methods
YCK Case Studies, Nature of Study, Study-Report Type

Review literature and three case studies of traumatic aortic rupture. 80% of victims die before reaching hospital. Triad of crushing chest injury, mediastinal widening, and left hemothorax should suggest diagnosis. Recommend prompt surgical intervention in all cases of suspected aortic rupture.

14-3717 S
Logan, W. D., Jr./ Jordan, W. C./ Soracco, G.
PENETRATING CARDIAC INJURIES.

BIBLIOGRAPHY

Emory Univ. School of Medicine, Dept. of Surgery/
Grady Memorial Hospital. Oct. 1964. 2 p. tables. ref.
American Surgeon, Vol. 30, No. 10, Oct. 1964, pp.
664-667.

Conference: Southeastern Surgical Congress, 21-28
March 1964.

JNG Laceration/Openwound, Injury/Trauma,
Accident
JNX Multiple Severe Injuries
OAKB Heart, Cardiovascular System, Anatomy/Body,
Biomedical Aspect
YEF Data Statistics, Contents, Study-Report Type

Compares results of three treatments in 30 patients
with injury severe enough to cause considerable bleeding
into the chest or cardiac tamponade. Reports no deaths
among those treated with pericardiocentesis alone, high
mortality for those treated by thoracotomy alone or
pericardiocentesis followed thoracotomy. Pericardiocentesis
does not increase late complications.

14-3719 S

Lundevall, J.
TRAUMATIC RUPTURE OF THE AORTA WITH SPECIAL REFERENCE TO ROAD ACCIDENTS.
Oslo Univ., Institute of Forensic Medicine (Norway).
1964. 3 p. table. ref.
Acta Pathologica et Microbiologica Scandinavica, Vol. 62,
1964, pp. 29-33.

JN Injury/Trauma, Accident
OAKC Blood Vessels, Cardiovascular System,
Anatomy/Body, Biomedical Aspect
WSI Autopsy, Medical, Methods
EA Age, People
L Time
JNK Hemorrhage

Describes 21 fatal closed injuries over ten-year
period. Because of intrathoracic hemorrhage, survival time
is rarely long enough to permit surgical treatment.

14-3725 S

Quast, D. C./ Shirkey, A. L./ Fitzgerald, J. B./ Beall,
A. C., Jr./ De Bakey, M. E.
**SURGICAL CORRECTION OF INJURIES OF THE
VENA CAVA: An analysis of sixty-one cases.**
Baylor Univ. College of Medicine, Cora and Webb Mading
Dept. of Surgery, Houston, Texas/ Jefferson Davis General
Hospital, Houston, Texas/ Ben Taub General Hospital,
Houston, Texas. 1965. 5 p. ref. tables. figs.
Journal of Trauma, Vol. 5, 1965, pp. 3-10
Contract No: DA-49-007-MD-2523/ HE-03137/
HE-05387.

Sponsor: Army Research and Development Command/
Public Health Service.

Conference: American Association for the Surgery of
Trauma, 24th annual, 1-3 Oct. 1964, Chicago, Illinois.

OAKCC Veins, Blood Vessels, Cardiovascular System,
Anatomy/Body, Biomedical Aspect
WSD Surgery, Medical, Methods
JNX Multiple Severe Injuries, Injury/Trauma, Accident
JNK Hemorrhage
JNPL Shock, Consequences

Describes 61 patients with vena caval injuries who
were alive on admission to hospital. Cases extend from
1946-1964. Gunshots, stabbings, and blunt trauma
accounted for inferior and superior vena caval wounds.
Details of treatment given. In presence of continuing
hemorrhage, operation should not await resuscitation.
Drawings illustrate location of vena caval injuries in the
sample and control of hemorrhage by direct pressure
during surgery. Blood loss and shock responsible for 28 of
the 31 fatalities. Associated injuries to other major
vascular structures were frequent.

14-3766 S

Zehnder, M. A.
**SYMPTOMATOLOGIE UND VERLAUF DER AORTEN-
RUPTUR BEI GESCHLOSSENER THORAXVERLET-
ZUNG: An Hand von 12 Fällen. [SYMPTOMS AND
THERAPY OF RUPTURE OF THE AORTA WITH
CLOSED CHEST INJURY: Study of 12 cases.]**
Hartford Hospital, Hartford, Connecticut. June 1960. 24
p. figs. tables. ref.
Thoraxchirurgie, Vol. 8, No. 1, June 1960, pp. 1-46.

OAKCB Arteries, Blood Vessels, Cardiovascular System,
Anatomy/Body, Biomedical Aspect
WSC Diagnosis, Medical, Methods
WSE Therapeutic
YCK Case Studies, Nature of Study, Study-Report
Type
L Time
YEF Data Statistics, Contents

State-of-the-art review covering occurrence and
frequency of traumatic rupture of the aorta and traumatic
aneurisms of the thoracic aorta with and without surgery.
2510 cases are covered in the referred literature. A review
of the spontaneous (non-trauma) cases found in the
literature is also made. 12 case studies out of own data are
discussed, arranged in order of length of survival time.

The mechanism of injury, the most frequent location,
length of survival, rib fractures, and the injury produced
in seven cases to perfectly normal and health aortas are
discussed. The anatomical sequence of events and
symptoms with closed-chest injury of the aorta are
discussed in table form, for early cases, for the period of
"illusion," and the period of "oblivion." Seven cases are
mentioned with time of survival, in which author con-
siders retrospectively that early detection and manage-
ment could have been life saving.

On the basis of author's cases a complete discussion is
presented of diagnostic techniques and symptoms.

14-3767 S

**TODESURSACHEN BEI FRISCHEN THORAXVERLET-
ZUNGEN. [DEATH CAUSES IN RECENT THORACIC
INJURIES.]** See 23-3767 S

14-3776 S

von Berg, V. J./ Moggi, L./ Jacobson, L. F./ Jordan,
P., Jr./ Johnston, C. G.
**TEN YEARS' EXPERIENCE WITH PENETRATING
INJURIES OF THE HEART.**
Wayne State Univ. College of Medicine, Dept. of Surgery,
Detroit, Michigan. 1961. 5 p. tables. ref. figs.
Journal of Trauma, Vol. 1, 1961, pp. 186-194.
Grant No: H-3465(C2)/ H-2553(C3).
Sponsor: National Institutes of Health/ Receiving Hos-
pital Research Corp.

BIBLIOGRAPHY

Conference: American Association for the Surgery of Trauma, 20th annual, 5-7 Oct. 1960, Coronado, California.

- JNG Laceration/Openwound, Injury/Trauma, Accident
- OAKB Heart, Cardiovascular System, Anatomy/Body, Biomedical Aspect
- VN Epidemiology, Disciplines
- L Time
- YEF Data Statistics, Contents, Study-Report Type
- JNK Hemorrhage
- WSD Surgery, Medical, Methods

Describe treatment and results of 102 cases treated during 1949-1958 with overall mortality rate of 13%. Decision whether to perform cardiorrhaphy was based on Beck's triad, positive pericardial aspiration, and/or radiological confirmation of cardiac injury. Recommend operative treatment for control of hemorrhage. Simple aspiration of pericardial sac limited to small number of cases where bleeding did not recur. Type of injury, location of wound are important in selection of therapy.

14-3780 N
SOME COMPLICATIONS OF UPPER LIMB INJURIES.
See 17-3780 N

14-3798 S
THORACIC TRAUMA: Analysis of 1022 cases. See 13-3798 S

14-3828 S
Greendyke, R. M.
TRAUMATIC RUPTURE OF AORTA. Special reference to automobile accidents.
14 Feb. 1966. 4 p. figs. tables. ref.
American Medical Association. Journal, Vol. 195, No. 7, 14 Feb. 1966, pp. 119-122.

- OAKC Blood Vessels, Cardiovascular System, Anatomy/Body, Biomedical Aspect
- WSI Autopsy, Medical, Methods
- JNB Fatal, Injury/Trauma, Accident
- JKB Ejection, Accident Hazards
- YEF Data Statistics, Contents, Study-Report Type
- YCB Research, Nature of Study

42 cases of traumatic aortic rupture were found in 1259 autopsies performed in one county. Cites literature to demonstrate rise in occurrence. One of six victims of fatal auto accidents sustained aortic rupture. Rupture was twice as common in ejected occupants as in those not ejected. Gives frequency of various bone fractures associated with aortic rupture. Study suggests that rapid deceleration and application of varying gravity units of force determine whether aortic rupture will occur to automobile occupants involved in accidents.

14-3829 S
Wilson, R. F./ Bassett, J. S.
PENETRATING WOUNDS OF THE PERICARDIUM OR ITS CONTENTS.
Wayne State Univ. College of Medicine, Dept. of Surgery, Detroit, Michigan. 14 Feb. 1966. 6 p. tables. ref.
American Medical Association. Journal, Vol. 195, No. 7, 14 Feb. 1966, pp. 105-110.

- JNG Laceration/Openwound, Injury/Trauma, Accident
- OAK Cardiovascular System, Anatomy/Body, Biomedical Aspect
- YEF Data Statistics, Contents, Study-Report Type
- JNPK Blood Loss/Bleeding, Consequences

Authors emphasize valuable factors in diagnosis, prognosis, and treatment of 200 patients. Pericardicentesis was used mainly as diagnostic and temporary therapeutic measure, and cardiorrhaphy was performed in 187 cases. Beck's triad, present in only 40%, was of limited diagnostic value. Twenty-two deaths were related primarily to bleeding, five to myocardial infarctions, and nine to combined bleeding, tamponade, and/or infarction.

14-3830 S
Maynard, A. de L./ Brooks, H. A./ Froix, C. J. L.
PENETRATING WOUNDS OF THE HEART.
Harlem Hospital Center, Dept. of Surgery, New York/ Columbia Univ. College of Physicians and Surgeons, New York. May 1965. 4 p. figs. tables. ref.
Archives of Surgery, Vol. 90, May 1965, pp. 680-686.

- OAKB Heart, Cardiovascular System, Anatomy/Body, Biomedical Aspect
- JNG Laceration/Openwound, Injury/Trauma, Accident
- L Time
- JNK Hemorrhage
- YEF Data Statistics, Contents, Study-Report Type
- WSD Surgery, Medical, Methods

According to Medical Examiner's records in New York City, about 30% of those with penetrating heart wounds reach hospital alive. Of 64 such patients, 58 were subjected to surgery with 53 survivals and five deaths. "Delayed" or secondary hemorrhage is discussed with brief case reports. Attention is directed to clinico-pathological complex of acute hemopericardium with tamponade plus massive hemothorax, the result of heart wound and laceration of internal mammary vessels.

14-3836 N
TRAUMATIC THORACIC AORTIC ANEURYSMS. See 13-3836 N

14-3846 S
Ricks, R. K./ Howell, J. F./ Beall, A. C., Jr./ De Bakey, M. E.
GUNSHOT WOUNDS OF THE HEART: A review.
Baylor Univ. College of Medicine, Cora and Webb Mading Dept. of Surgery, Houston, Texas/ Jefferson Davis General Hospital, Houston, Texas. June 1965. 3 p. tables. ref.
Surgery, Vol. 57, No. 6, June 1965, pp. 787-790.
Grant No: HE-03137.
Contract No: DA-49-007-MD-2523.
Sponsor: Public Health Service/ Army Research and Development Command.

- JNG Laceration/Openwound, Injury/Trauma, Accident
- OAKB Heart, Cardiovascular System, Anatomy/Body, Biomedical Aspect
- YER General Discussion, Contents, Study-Report Type
- JNB Fatal
- WSD Surgery, Medical, Methods

BIBLIOGRAPHY

Describes 31 cases alive on arrival at hospital. Gives clinical condition, plan of treatment, associated organ injury, complications, and results of treatments. Recommends pericardiocentesis as primary method of management.

14-3847 S

THE RECOGNITION AND MANAGEMENT OF PERIPHERAL ARTERIAL INJURIES. See 17-3847 S

14-3861 N

Cheng, H. C./ Ripstein, C. B./ Burns, H.
SUCCESSFUL SURGICAL MANAGEMENT OF THROUGH-AND-THROUGH GUNSHOT WOUND OF THE HEART: A case report.
Brookdale Hospital Center, Brooklyn, New York. May 1965. 3 p. figs. ref.
Journal of Thoracic and Cardiovascular Surgery, Vol. 49, No. 5, May 1965, pp. 868-873.

JNG Laceration/Openwound, Injury/Trauma, Accident
WSD Surgery, Medical, Methods
OAKB Heart, Cardiovascular System, Anatomy/Body, Biomedical Aspect
YCK Case Studies, Nature of Study, Study-Report Type

Presents case report of 14-year old boy with through-and-through gunshot wound of heart and lung. After emergency exploratory thoracotomy, wounds were repaired surgically and patient fully recovered. Perforated interventricular septum healed spontaneously.

14-3863 N

CLOSED TRAUMATIC RUPTURE OF COMMON FEMORAL ARTERY. See 17-3863 N

14-3876 N

Lui, A. H. F./ Glas, W. W./ Bercu, B. A.
STAB WOUND OF THE HEART WITH TAMPONADE AND INTERVENTRICULAR SEPTAL DEFECT.
Wayne County General Hospital, Eloise, Michigan. March 1965, 4 p. ref.
Journal of Thoracic and Cardiovascular Surgery, Vol. 49, No. 3, March 1965, pp. 517-522.

JNG Laceration/Openwound, Injury/Trauma, Accident
OAKB Heart, Cardiovascular System, Anatomy/Body, Biomedical Aspect
JNP Consequences
YCC State-of-the-Art, Nature of Study, Study-Report Type
WSD Surgery, Medical, Methods

Authors give detailed case report on infrequent injury and review similar injuries discussed by other authors. In this case, initial pericardiocentesis was followed by surgical repair 4½ hours after admission. Several months later, persistent ventricular septal defect was repaired with aid of pump oxygenator. In general, period of observation prior to repair allows one to evaluate hemodynamic significance to left-to-right shunt, permits healing of small defects, and permits wound edges to become fibrotic.

14-3892 N

McKnight, J. T./ Meyer, J. A./ Neville, J. F., Jr.
NONPENETRATING TRAUMATIC RUPTURE OF THE THORACIC AORTA.
New York State Univ., Upstate Medical Center, Dept. of Surgery, Syracuse. Dec. 1964. 3 p. ref.
Annals of Surgery, Vol. 160, No. 6, Dec. 1964, pp. 1069-1072.

JNE Contusion/Crushing, Injury/Trauma, Accident
OAKCB Arteries, Blood Vessels, Cardiovascular System, Anatomy/Body, Biomedical Aspect
YCK Case Studies, Nature of Study, Study-Report Type
WSD Surgery, Medical, Methods

Discusses occurrence and etiology of acute traumatic rupture of aorta, with two case reports and reference to earlier data. Of patients who arrive at hospital alive, 85% will live long enough for surgical intervention. Surgical procedure, difficulty of diagnosis and formation of false aneurism are discussed. Diagnostic value of a widened superior mediastinum is emphasized.

14-3893 N

Lucido, J. L./ Voorhees, R. J.
IMMEDIATE THORACOTOMY FOR WOUNDS OF THE HEART.
St. Louis Univ. School of Medicine, Dept. of Surgery, Missouri/ St. Louis County Hospital, Thoracic Surgical Service, Missouri/ St. Louis City Hospital, Surgical Service, Missouri. Nov. 1964. 3 p. table. ref.
American Journal of Surgery, Vol. 108, Nov. 1964, pp. 664-669.
Conference: Southwestern Surgical Congress, 16th annual, 27-30 April 1964, Texas.

WSD Surgery, Medical, Methods
OAF Thorax, Anatomy/Body, Biomedical Aspect
OAKB Heart, Cardiovascular System
WU Testing/Measures
YCK Case Studies, Nature of Study, Study-Report Type
L Time
WSC Diagnosis

Clinical data on five successful cardiorrhaphies are tabulated with description of injury, surgical procedure, and postoperative information. Pericardial tamponade, diagnostic procedures, and management of injuries are discussed and heart wounds classified. Pericardiocentesis not always satisfactory. Bias is claimed in statistics indicating high mortality rates for thoracotomy, because usually only critical patients are operated on.

14-3901 N

MANAGEMENT OF FRACTURE WITH VASCULAR INJURY. See 17-3901 N

14-3942 N

Samuel, E.
DECELERATION INJURIES OF HEART AND LUNG.
Royal Edinburgh Infirmary (England). Dec. 1963. 6 p. figs. ref.
Postgraduate Medical Journal, Vol. 39, Dec. 1963, pp. 695-704.

- JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
OAKB Heart, Cardiovascular System, Anatomy/Body, Biomedical Aspect
OALE Lungs, Respiratory System
NKE Deceleration, Operating Conditions, Physical Aspect
YCK Case Studies, Nature of Study, Study-Report Type

Deceleration injuries incurred in automobile accidents are classified as impact injuries (chest-wall injuries, pleural changes, pulmonary damage, mediastinal hematoma) and momentum injuries (thoracic-duct, diaphragm, heart and aorta, cardiac injuries, and pericardial effusion). Importance and difficulty of recognizing type of injury is stressed. Radiologic features of pulmonary and cardiac injuries following nonpenetrating trauma are considered.

- 14-3944 S
DEEP VEIN THROMBOSIS FOLLOWING FRACTURES OF THE TIBIAL SHAFT: A phlebographic study of 40 patients one to two weeks after injury and after fracture union. See 17-3944 S

- 14-3976 S
DER TÖDLICHE VERKEHRSUNFALL AUS DER SICHT DES PATHOLOGEN. [THE FATAL TRAFFIC ACCIDENT FROM THE PATHOLOGIST'S VIEWPOINT.] See 23-3976 S

- 14-4013 N
THROMBOEMBOLIC COMPLICATIONS OF ORTHOPEDICS AND THE SURGERY OF TRAUMA. See 17-4013 N

- 14-4029 S
Beall, A. C., Jr.
PENETRATING WOUNDS OF THE AORTA.
Baylor Univ. College of Medicine, Cora and Webb Mading Dept. of Surgery, Houston, Texas/ Jefferson Davis General Hospital, Houston, Texas. May 1960. 5 p. tables. figs. ref.
American Journal of Surgery, Vol. 99, May 1960, pp. 770-774.
Grant No: H-3137.
Sponsor: Public Health Service.

- JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
OAKCB Arteries, Blood Vessels, Cardiovascular System, Anatomy/Body, Biomedical Aspect
WSD Surgery, Medical, Methods
YEF Data Statistics, Contents, Study-Report Type
JNP Consequences/Complications

Authors survey 23 cases of penetrating wounds of the aorta. Discuss etiology, location of injury, associated injuries, condition of patients, resuscitation, repair, and results. Conclude that attempted resuscitation and repair are mandatory. Clinical summary for each case in tabular form.

- 14-4032 S
Spencer, F. C./ Guerin, P. F./ Blake, H. A./ Bahnson, H. T.
A REPORT OF FIFTEEN PATIENTS WITH TRAUMATIC RUPTURE OF THE THORACIC AORTA.
Johns Hopkins Hospital, Dept. of Surgery, Baltimore, Maryland/ Johns Hopkins Univ., School of Medicine, Dept. of Surgery, Baltimore, Maryland/ Maryland Chief Medical Examiner Office/ Walter Reed General Hospital, Washington, D.C. Jan. 1961. 12 p. tables. figs. ref.
Journal of Thoracic and Cardiovascular Surgery, Vol. 41, No. 1, Jan. 1961, pp. 1-22.
Grant No: H-226.
Sponsor: National Heart Institute, Bethesda, Maryland.
Conference: American Association for Thoracic Surgery, 40th annual, 11-13 May 1960, Miami Beach, Florida.

- JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
OAKC Blood Vessels, Cardiovascular System, Anatomy/Body, Biomedical Aspect
VN Epidemiology/Etiology, Disciplines
WSC Diagnosis, Medical, Methods
WSD Surgery

Report concerns authors' experience with 15 patients seen soon after aortic rupture or seen with aneurysm a long time after injury. 14 were victims of automobile accidents. Brief case histories of 7 patients seen soon after injury. These cases demonstrate aortic transection may be present with few external signs and that wide mediastinum on chest roentgenogram and history of injury are most helpful diagnostic aids. There is often time for reparative treatment. Table cites 43 cases of traumatic thoracic aneurysms collected from literature and states cause, duration, location, symptoms, size of aneurysm, operative procedure if any, and subsequent course.

- 14-4033 S
Strassmann, G.
TRAUMATIC RUPTURE OF THE AORTA.
New York City, Office of the Chief Medical Examiner, New York/ Metropolitan State Hospital, Waltham, Massachusetts. 1947. 4 p. figs. ref.
American Heart Journal, Vol. 33, 1947, pp. 508-515.

- JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
OAKC Blood Vessels, Cardiovascular System, Anatomy/Body, Biomedical Aspect
WSC Diagnosis, Medical, Methods
WSD Surgery

Traumatic rupture of the aorta is more frequent than literature suggests. Study of 7,000 autopsies conducted between 1936 and 1942 yielded 72 cases of traumatic rupture and 24 of spontaneous rupture. Differences between the two types of lesions regarding occurrence, origin, and pathologic picture are discussed. 51 cases of traumatic rupture resulted from automobile accidents, the most frequent victims being pedestrians. In 59 cases of traumatic rupture, death occurred within one hour of injury.

- 14-4040 S
Griswold, R. A./ Drye, J. C.
CARDIAC WOUNDS.

BIBLIOGRAPHY

Louisville Univ. School of Medicine, Dept. of Surgery, Kentucky/ Louisville General Hospital, Kentucky. June 1954. 2 p. graph. ref.
Annals of Surgery, Vol. 139, No. 6, June 1954, pp. 783-785.
Conference: Southern Surgical Association, 9 Dec. 1953, Hot Springs, Virginia.

OAKB Heart, Cardiovascular System, Anatomy/Body, Biomedical Aspect
JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
JNG Laceration/Openwound/Penetrating
YEF Data Statistics, Contents, Study-Report Type
WSD Surgery, Medical, Methods

Compare treatment and mortality of two series of patients (108) with cardiac wounds. When more liberal indications for surgery were used in more recent series, operability rose to 90%, and total mortality decreased from 46% to 32%. Exploratory thoracotomy is said to be far safer than aspiration. Hospital's most important change in management of cardiac wounds has been to decrease extent of diagnostic procedures prior to surgery.

14-4048 N

Jahnke, E. J., Jr./ Fisher, G. W./ Jones, R. C.
ACUTE TRAUMATIC RUPTURE OF THE THORACIC AORTA: Report of six consecutive cases of successful early repair.
Walter Reed General Hospital, Thoracic and Cardiovascular Surgery Service, Washington, D.C./ Walter Reed General Hospital, Cardiology Service, Washington, D.C. July 1964. 8 p. figs. tables. ref.
Journal of Thoracic and Cardiovascular Surgery, Vol. 48, No. 1, July 1964, pp. 63-77.

JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
OAKB Blood Vessels, Cardiovascular System, Anatomy/Body, Biomedical Aspect
WSD Surgery, Medical, Methods
NKFP Period, Frequency/Time, Operating Conditions, Physical Aspect
YCK Case Studies, Nature of Study, Study-Report Type

Comprehensive case reports, brief review of the literature. Stresses the significance of a widened mediastinum. Discusses the value of preoperative forward aortograms.

14-4059 S

Zehnder, M. A.
AORTENRUPTUR BEI STUMPFEM THORAX-TRAUMA: Retrospektive Auswertung der Kasuistik und zukünftige chirurgische Möglichkeiten. [AORTIC RUPTURE IN BLUNT THORACIC TRAUMAS: Retrospective evaluation of the casuistics and future surgical possibilities].
Hartford Hospital, Hartford, Connecticut. Dec. 1959. 12 p. tables. figs. photos.
Helvetica Chirurgica Acta, Vol. 26, Dec. 1959, pp. 442-464.

JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident

OAF Thorax, Anatomy/Body, Biomedical Aspect
OAKCB Arteries, Blood Vessels, Cardiovascular System
WSC Diagnosis, Medical, Methods
WSD Surgery
WSE Therapeutic
YCK Case Studies, Nature of Study, Study-Report Type

Author describes 20 cases giving time of survival, first "free-interval" symptoms after first interval, critical interval after "delayed transrapture," diagnosis, thoracic fractures, description of the aortic injury, secondary injuries, and second "free-interval."
Critical deceleration factors for various types of accidents are discussed. Misdiagnoses are discussed.

14-4061 S

DIE URSACHEN POSTOPERATIVER TODESFÄLLE. [THE CAUSES OF POST OPERATIVE DEATHS.] See 18-4061 S

14-4071 S

ARTERIAL INJURIES IN CIVILIAN PRACTICE: A current reappraisal with analysis of forty-three cases. See 17-4071 S

14-4072 S

ANALYSIS OF FACTORS AFFECTING SURVIVAL AFTER CHEST INJURIES. See 13-4072 S

14-4083 S

Griswold, R. A./ Maguire, C. H.
PENETRATING WOUNDS OF THE HEART AND PERICARDIUM.
Louisville Univ. School of Medicine, Kentucky/ Louisville City Hospital, Kentucky. 1942. 7 p. figs. tables. ref.
Surgery, Gynecology and Obstetrics, Vol. 74, 1942, pp. 406-418.
Conference: American College of Surgeons, Clinical Congress, 3-7 Nov. 1941, Boston, Massachusetts.

NKF Frequency/Time, Operating Conditions, Physical Aspect
JNG Laceration/Openwound/Penetrating, Injury/Trauma, Accident
OAKB Heart, Cardiovascular System, Anatomy/Body, Biomedical Aspect
YEF Data Statistics, Contents, Study-Report Type
WSD Surgery, Medical, Methods
WSC Diagnosis

Authors discuss pathology, diagnosis, treatment, post-operative treatment, and prognosis for 47 cases. Present brief summary of each case.

14-4122 N

Kaulbach, W./ Krebs, H.
STERNUMFRAKTUR UND HERZTRAUMA. [FRACTURE OF THE STERNUM AND INJURY TO THE HEART].
Heidelberg Univ., Surgical Clinic (Germany). 1960. 4 p. table. figs. ref.
Monatsschrift fuer Unfallheilkunde und Versicherungsmedizin, Vol. 63, 1960, pp. 321-327.

JN Injury/Trauma, Accident
OAF Thorax, Anatomy/Body, Biomedical Aspect
VN Epidemiology/Etiology, Disciplines

Authors show increasing trend of occurrence from 1945-1959. Etiology, complications and associated injury, and observations of EKG as affected by sternum injury (commotio cordis) discussed.

14-4157 S

Maguire, C. H./ Griswold, R. A.
FURTHER OBSERVATIONS ON PENETRATING WOUNDS OF THE HEART AND PERICARDIUM.
Louisville Univ., Dept. of Surgery, Kentucky/ Louisville General Hospital, Kentucky. Nov. 1947. 6 p. figs. ref. tables.
American Journal of Surgery, Vol. 74, Nov. 1947, pp. 721-731.

JNG Laceration/Openwound/Penetrating, Injury/Trauma, Accident
OAKB Heart, Cardiovascular System, Anatomy/Body, Biomedical Aspect
YCK Case Studies, Nature of Study, Study-Report Type
YEF Data Statistics, Contents

Authors review previous experience with 47 cases and report on 33 further cases. Describe and discuss pathology, diagnosis, and treatment. Present short resumé for each of 23 patients operated upon. Data statistics: cases admitted; time from injury to admission; operated cases; postoperative deaths; mortality.

14-4158 S

Ransdell, H. T., Jr./ Glass, H., Jr.
GUNSHOT WOUNDS OF THE HEART: A review of twenty cases.
Louisville Univ., Dept. of Surgery, Kentucky/ Louisville General Hospital, Kentucky. May 1960. 5 p. figs. ref. tables.
American Journal of Surgery, Vol. 99, May 1960, pp. 788-797.

JNG Laceration/Openwound/Penetrating, Injury/Trauma, Accident
OAKB Heart, Cardiovascular System, Anatomy/Body, Biomedical Aspect
YEF Data Statistics, Contents, Study-Report Type
WSE Therapeutic, Medical, Methods

Authors describe and discuss findings. Discuss diagnosis and pathology. Recommend immediate operation and give detailed description of their treatment procedure. Data statistics: location and type of wound and treatment; type of tamponade. Tabulate, for each patient: race; sex; age; weapon; time from wound to admission; time from admission to operation; route in hospital; location of wound; type of wound; result; other injuries; wound entrance; wound exit; tamponade; time in hospital.

14-4159 N

BULLET TRANSECTION OF BOTH COMMON CAROTID ARTERIES WITH IMMEDIATE REPAIR AND SURVIVAL. See 12-4159 N

14-4165 N

Kleinert, H. E.
HOMOGRAFT PATCH REPAIR OF BULLET WOUNDS OF THE AORTA: Experimental study and report of a case.
Louisville Univ., Dept. of Surgery, Kentucky. May 1958. 6 p. figs. ref. tables.
Archives of Surgery, Vol. 76, May 1958, pp. 811-820.

OAKCB Arteries, Blood Vessels, Cardiovascular System, Anatomy/Body, Biomedical Aspect
WSD Surgery, Medical, Methods
YCK Case Studies, Nature of Study, Study-Report Type
YCG Laboratory Experiment

Author describes case of successful repair and a study of experimentally produced aortic wounds in dogs. Concludes that a homograft patch should not be necessary. Reports pathological findings.

14-4197 S

ARTERIAL REPAIR DURING THE KOREAN WAR.
See 17-4197 S

14-4509 S

Bland, E. F./ Beebe, G. W.
MISSILES IN THE HEART: A twenty-year follow-up report of World War II cases.
Massachusetts General Hospital, Boston/ National Research Council, Div. of Medical Sciences, Washington, D.C. 12 May 1966. 8 p. tables. figs. ref.
New England Journal of Medicine, Vol. 274, No. 19, 12 May 1966, pp. 1039-1046. Sponsor: Veterans Administration, Washington, D.C.

JNG Laceration/Openwound/Penetrating, Injury/Trauma, Accident
OAKB Heart, Cardiovascular System, Anatomy/Body, Biomedical Aspect
YEF Data Statistics, Contents, Study-Report Type
YCL Evaluation/Effectiveness, Nature of Study

Clinical study of 40 cases. Authors conclude that actual risk from a retained fragment in the heart is minimal, but that the resulting psychic trauma can be disabling. Suggest removal of such fragments whenever possible, and maximum reassurance of the patient.

14-4522 S

Maynard, A. L./ Avecilla, M. J./ Naclerio, E. A.
THE MANAGEMENT OF WOUNDS OF THE HEART. A recent series of 43 cases with comment on pericarditis in hemopericardium.
Harlem Hospital Center, Surgical Service, New York, New York. Dec. 1956. 3 p. figs. ref.
Annals of Surgery, Vol. 144, No. 6, Dec. 1956, pp. 1018-1022.

OAKB Heart, Cardiovascular System, Anatomy/Body, Biomedical Aspect
JNG Laceration/Openwound/Penetrating, Injury/Trauma, Accident
JNP Consequences/Complications
WSD Surgery, Medical, Methods

BIBLIOGRAPHY

Authors recommend surgical therapy in serious wounds of the heart. Discourage use of pericardiocentesis as definitive therapy. Describe surgical procedure. Data statistics: mortality; treatment; complications; necropsy findings; time of death.

14-4527 S

Zeldenrust, J./ Aarts, J. H.
TRAUMATISCHE AORTA-RUPTUUR BIJ VERKEERSONGEVALLLEN. [TRAUMATIC AORTIC RUPTURE IN TRAFFIC ACCIDENTS.]
10 March 1962. 5 p. ref. figs.
Nederlandsch Tijdschrift voor Geneeskunde, Vol. 106, 10 March 1962, pp. 464-468.
Order No: STS 6329 (English translation).

YEF Data Statistics, Contents, Study-Report Type
JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
OAKCB Arteries, Blood Vessels, Cardiovascular System, Anatomy/Body, Biomedical Aspect

Eighty-eight cases of aortic rupture and 28 of other aortic damage in 800 traffic accident fatalities. Authors describe and discuss victim's mode of transportation, cause, pathology, pre-existing pathology, associated injuries, complications, diagnosis and effect of safety belts.

14-4528 S

Jensen, O. M.
TRAUMATISK AORTARUPTUR: En analyse af 68 fatale tilfaelde. [TRAUMATIC AORTIC RUPTURE: An analysis of 68 fatal cases.]
1964. 5 p. ref. tables.
Nordisk Medicin, Vol. 71, No. 11, 1964, pp. 337-341.
Order No: STS 6333 (English translation).

NKFF Delay, Frequency/Time, Operating Conditions, Physical Aspect
JN Injury/Trauma, Accident
OAKCB Arteries, Blood Vessels, Cardiovascular System, Anatomy/Body, Biomedical Aspect
YEF Data Statistics, Contents, Study-Report Type
JNE Contusion/Crushing/Blunt

Cases examined at National Morgue of Jutland between 1920 and 1963.

Author notes the increasing incidence of this injury. Believes higher driving speeds a likely explanation. Analyzes data and discusses origin of the injury, clinical findings, and treatment in surviving patients. Concludes most such patients are beyond therapeutic aid; future efforts should be concentrated on prophylactic measures. Data statistics: year of injury; age; sex; appearance, course of rupture; location of rupture; secondary lesions; external conditions (type of accident); survival time.

14-4533 S

17 LÉSIONS ARTÉRIELLES FÉMORO-POPLITÉES TRAITÉES PAR RECONSTRUCTION IMMÉDIATE. [17 FEMORO POPLITAL ARTERIAL LESIONS TREATED BY IMMEDIATE RECONSTRUCTION.] See 17-4533 S

15-2592 S

TRAFFIC INJURY IN BRISBANE. Report of a general survey. See 01-2592 S

15-3701 S

Shirkey, A. L./ Wukasch, D. C./ Beall, A. C., Jr./ Gordon, W. B., Jr./ De Bakey, M. E.
SURGICAL MANAGEMENT OF SPLENIC INJURIES.
Baylor Univ. College of Medicine, Cora and Webb Mading Dept. of Surgery/ Jefferson Davis General Hospital, Houston, Texas. Nov. 1964. 3 p. tables. ref.
American Journal of Surgery, Vol. 108, Nov. 1964, pp. 630-635.
Contract No: DA-49-193-MD-2523.
Grant No: HE-03137.
Sponsor: Public Health Service/ Army.
Conference: Southwestern Surgical Congress, 16th annual, 27-30 April 1964, San Antonio, Texas.

YEF Data Statistics, Contents, Study-Report Type
OAJN Spleen, Digestive System/Alimentary Tract, Anatomy/Body, Biomedical Aspect
JNK Hemorrhage, Injury/Trauma, Accident
JNX Multiple Severe Injuries

Examines 125 cases with penetrating and 64 cases with blunt trauma to spleen during 17-year period. Mortality with penetrating injury was 18%. Because of associated injury, mortality rate with blunt trauma was 30%. The 43 blunt-trauma cases resulting from auto accidents suffered 30% mortality. Lists associated injuries for penetrating and blunt injuries, describes management of abdominal wounds and surgical techniques. Isolated splenic injuries cause death only through blood loss. Because the only treatment, splenectomy, is simple, the key to lowering mortality is early recognition. Because of dangers of delayed splenic rupture, all patients with history of trauma of left side of chest, left flank or left upper abdomen must be closely observed for minimum of two weeks.

15-3706 S

McClelland, R. N./ Shires, T.
MANAGEMENT OF LIVER TRAUMA IN 259 CONSECUTIVE PATIENTS.
Texas Univ., Southwestern Medical School, Dept. of Surgery, Dallas. Feb. 1965. 5 p. ref. tables.
Annals of Surgery, Vol. 161, No. 2, Feb. 1965, pp. 248-257.

JRGI Professional/Physician, Treatment/Care, Recovery of Injured, Accident
OAJM Liver/Biliary Tract, Digestive System/Alimentary Tract, Anatomy/Body, Biomedical Aspect
YEF Data Statistics, Contents, Study-Report Type
JNP Consequences, Injury/Trauma
JNK Hemorrhage

Describe cases reviewed at hospital, 1953-1963, including 31 instances of blunt trauma with 25 resulting from automobile accidents. Methods of diagnosis are discussed, including results with peritoneal tap. Early exploration, use of optimal amounts of blood and electrolyte solutions, adequate drainage, suture and resection to control hemorrhage, and the use of antibiotics have decreased mortality from liver injury.

15-3709 S

Perry, J. F., Jr.
A FIVE-YEAR SURVEY OF 152 ACUTE ABDOMINAL INJURIES.

BIBLIOGRAPHY

Ancker Hospital, Dept. of Surgery/ Minnesota Univ. School of Medicine, Minneapolis. 1965. 5 p. tables. ref. *Journal of Trauma*, Vol. 5, 1965, pp. 53-61.

YEF Data Statistics, Contents, Study-Report Type
JNE Contusion/Crushing, Injury/Trauma, Accident
JNG Laceration/Openwound
OAE Abdomen, Anatomy/Body, Biomedical Aspect
OAJM Liver/Biliary Tract, Digestive System/Alimentary Tract
WSC Diagnosis, Medical, Methods

Describes 92 civilian hospital patients with blunt and 60 with penetrating trauma, including 73 blunt-trauma victims of traffic accidents. Lists numbers of penetrating and blunt injuries involving specific organs. Death occurred in 6.7% with penetrating wounds, 45.7% with blunt trauma. Recommends exploration of all patients with penetrating abdominal wounds or suspected abdominal visceral involvement after blunt trauma.

15-3710 S
CONCEALED HEMORRHAGE DUE TO PELVIC FRACTURE. See 24-3710 S

15-3720 S
Solheim, K.
CLOSED ABDOMINAL INJURIES.
Uppsala Univ., Dept. of Pathology (Sweden). 1963. 8 p. ref. tables. fig.
Acta Chirurgica Scandinavica, Vol. 126, pp. 579-592, 1963.
Sponsor: Norges Almenvitenskapelige Forskiningsrad. Conference: Norwegian Surgical Association, 3 Nov. 1962, Oslo, Norway.

JNE Contusion/Crushing, Injury/Trauma, Accident
OAE Abdomen, Anatomy/Body, Biomedical Aspect
YEF Data Statistics, Contents, Study-Report Type
EA Age, People
EF Sex
OAMB Kidneys, Urogenital System
OAJM Liver/Biliary Tract, Digestive System/Alimentary Tract
OAJN Spleen/Lymph Tracts
WSC Diagnosis, Medical, Methods
L Time
JNK Hemorrhage

Author reports on treatment and survival rates of 291 patients in Oslo. Gives mortality rates, overall and by type of injury; diagnostic and treatment procedures for injuries to different abdominal organs; and indications for exploratory laparotomy and Roentgen examination.

15-3741 S
PULMONALE UND ENTERALE KOMPLIKATIONEN NACH HIRNSCHÄDIGUNGEN. [PULMONARY AND ENTERAL COMPLICATIONS AFTER BRAIN INJURIES.] See 11-3741 S

15-3750 S
Oberniedermayr, A.
DIE STUMPFEN BAUCHVERLETZUNGEN IM KINDESALTER. [BLUNT ABDOMINAL INJURIES IN CHILDHOOD.]

5 Nov. 1963. 7 p. illus.
Langenbecks Archiv fuer Klinische Chirurgie, Vol. 304, 5 Nov. 1963, pp. 583-595.

JNE Contusion/Crushing, Injury/Trauma, Accident
OAE Abdomen, Anatomy/Body, Biomedical Aspect
EC Children, People
WSD Surgery, Medical, Methods
YEF Data Statistics, Contents, Study-Report Type
JNPL Shock, Consequences

Discusses 62,574 cases over three decades, including 36 cases of blunt injury to abdomen and 41 to the urogenital tract. Low frequency of this kind of injury and diagnosis of child as compared to adult are discussed. Case study is given of bilateral rupture of kidney.

15-3770 N
MASSIVE LIVER INJURY AND SHOCK. See 24-3770 N

15-3772 S
O'Brien, S. E./ Fyshe, T. G.
REPORT ON 41 CASES OF RUPTURE OF THE SPLEEN.
July 1961. 3 p. ref.
Canadian Journal of Surgery, Vol. 4, 1961, pp. 434-438.

YCK Case Studies, Nature of Study, Study-Report Type
YEK Law/Code/Statute, Contents
OAJN Spleen, Digestive System/Alimentary Tract, Anatomy/Body, Biomedical Aspect
WSC Diagnosis, Medical, Methods
L Time
JNK Hemorrhage, Injury/Trauma, Accident

Authors describe symptoms and abdominal signs with case reports on five instances of delayed rupture. Of cases studied, six patients died. Injury is treacherous because start and amount of bleeding are unpredictable. In presence of hemorrhage and/or hematoma formation, prompt splenectomy is recommended.

15-3785 S
Nation, E. F./ Massey, B. D.
RENAL TRAUMA: Experience with 258 cases.
1963. 3 p.
Journal of Urology, Vol. 89, No. 6, June 1963, pp. 775-778.
Conference: American Urological Association, Western Section, Inc., 23-26 April 1962, San Francisco, California

YEF Data Statistics, Contents, Study-Report Type
OAMB Kidneys, Urogenital System, Anatomy/Body, Biomedical Aspect
VN Epidemiology, Disciplines
WSD Surgery, Medical, Methods
WSE Therapeutic

Analyzes cases of renal injury due to external trauma during nine-year period, the etiology of trauma, type of injury and associated injuries, symptoms, treatment, and mortality. Excretory urography usually gives sufficient information for early urological management. Retrograde pyelography is done only if doubt remains concerning the status of the upper urinary tract. Emergency surgery for

BIBLIOGRAPHY

renal injury should be performed only if there is continued hemorrhage.

15-3797 S

Sherman, R. T./ Parrish, R. A.
MANAGEMENT OF SHOTGUN INJURIES: A review of 152 cases.
Tennessee Univ. Div. of Surgery/ John Gaston Hospital, Memphis, Tennessee. 1963. 6 p. tables, figs. ref.
Journal of Trauma, Vol. 3, 1963, pp. 76-86.

JNG Laceration/Openwound, Injury/Trauma, Accident
YEF Data Statistics, Contents, Study-Report Type
WSE Therapeutic, Medical, Methods
WSD Surgery
VN Epidemiology, Disciplines
OAI Head, Anatomy/Body, Biomedical Aspect
OAE Abdomen
OAF Thorax

Records of 152 patients with shotgun injuries and 382 with wounds produced by other firearms show mortality from shotgun wounds over twice that of other gunshot wounds. Shotgun wounds were separated into three types by range and observed pathology. Cases were analyzed by type and location of wounds, methods of management, results, and major secondary procedures.

15-3799 S

Root, G. T./ Christensen, B. H.
EARLY SURGICAL TREATMENT OF ABDOMINAL INJURIES IN THE TRAFFIC VICTIM.
Highland Alameda County Hospital, Oakland, California. Sept. 1957. 2 p. ref. tables, figs.
Surgery, Gynecology, and Obstetrics, Vol. 105, Sept. 1957, pp. 264-267.

JN Injury/Trauma, Accident
OAE Abdomen, Anatomy/Body, Biomedical Aspect
WSD Surgery, Medical, Methods
VN Epidemiology, Disciplines
L Time
YEF Data Statistics, Contents, Study-Report Type
JNX Multiple Severe Injuries

Review of 1,988 records of traffic victims. 45 deaths in series and 44% were associated with abdominal injuries. Authors urge early abdominal exploration in patients with significant symptoms. Data statistics: sex; number of accidents per month; type of accident; disposition of patients; type of injury; findings, treatment and results in patients with abdominal symptoms; number of deaths per type of injury.

15-3801 S

Mikesky, W. E./ Howard, J. M./ DeBakey, M. E.
INJURIES OF THE LIVER IN 300 CONSECUTIVE PATIENTS.
Baylor Univ. College of Medicine, Dept. of Surgery, Houston, Texas/ Jefferson Davis General Hospital, Houston, Texas. Oct. 1956. 8 p. figs. ref. tables.
Surgery, Gynecology, and Obstetrics, Vol. 103, Oct. 1956, pp. 323-337.
Sponsor: Baylor Univ. College of Medicine, Cora and Webb Mading Fund for Medical Research.

OAJM Liver, Digestive System/ Alimentary Tract, Anatomy/Body, Biomedical Aspects
JNX Multiple Severe Injuries, Injury/Trauma, Accident
VN Epidemiology, Disciplines
L Time
WSD Surgery, Medical, Methods
JNP Consequences
JNK Hemorrhage
WSI Autopsy
YEC Bibliography, Contents, Study-Report Type
YEF Data Statistics

Study is based on patients alive on admission to hospital. Agent, type, location, and path of injuries and associated injuries, surgical management and complications, and reduction of mortality between 1939 and 1954 are discussed. Decrease in mortality attributed to more adequate blood replacement, antibiotic therapy, and earlier, improved surgical care. Further progress will depend on refinements of hepatic debridement and resection to control hepatic hemorrhage. Major contributing causes of death are tabulated for 62 patients.

15-3819 S

Barnett, W. O./ Hardy, J. D./ Yelverton, R. L.
PANCREATIC TRAUMA: Review of 23 cases.
Mississippi Univ. Medical Center, Dept. of Surgery, Jackson. June 1966. 5 p. tables, figs. ref.
Annals of Surgery, Vol. 163, No. 6, June 1966, pp. 892-901.
Grant No: AM-04644-05.
Sponsor: National Institutes of Health.
Conference: Southern Surgical Association, 7-9 Dec. 1965, Hot Springs, Virginia.

OAE Abdomen, Anatomy/Body, Biomedical Aspect
JNG Laceration/Openwound, Injury/Trauma, Accident
YEF Data Statistics, Contents, Study-Report Type

Study covers patients who underwent one or more abdominal operations during 10-year period. Patients were grouped according to blunt, penetrating, or surgical trauma. Type of injury, wounding agent, and operative procedure are given for blunt trauma. Penetrating injuries are discussed in more detail indicating operations utilized and additional injuries. Nature of injury and operation, complications, treatment, and results are given for surgical-trauma cases.

15-3823 N

Fahlund, G. T. R./ Smedley, W. P.
TRAUMATIC RUPTURE OF THE SPLEEN: A ten-year experience with 18 cases.
Geisinger Medical Center, Danville, Pennsylvania. May 1966. 3 p. ref. illus. tables.
The American Surgeon, Vol. 32, No. 5, May 1966, pp. 325-328.

JNE Contusion/Crushing, Injury/Trauma, Accident
JNPL Shock, Consequences
OAJN Spleen, Digestive System/Alimentary Tract, Anatomy/Body, Biomedical Aspect
YCK Case Studies, Nature of Study, Study-Report Type
WSD Surgery, Medical, Methods

BIBLIOGRAPHY

Blunt trauma occurred in thirteen cases, five due to automobile accidents. Causes listed in table. Possible results of such trauma are given, with three case reports.

15-3825 S

Hopson, W. B./ Sherman, R. T./ Sanders, J. W.
STAB WOUNDS OF THE ABDOMEN: 5-year review of 297 cases.
Tennessee Univ., Div. of Surgery, Memphis. March 1966. 4 p. tables. ref.
The American Surgeon, Vol. 32, No. 3, March 1966, pp. 213-218.

JNG Laceration/Openwound, Injury/Trauma, Accident
OAE Abdomen, Anatomy/Body, Biomedical Aspect
YEF Data Statistics, Contents, Study-Report Type
VN Epidemiology, Disciplines
WSC Diagnosis, Medical, Methods
WSD Surgery

Clinical and operative findings analyzed. Patients, averaging 28.5 years of age, were divided into three groups based on presence of peritoneal penetration and visceral injury. Time from injury to admission and from admission to surgery is given. In 17% of the patients time from injury to admission in the hospital was over four hours; in 34% of the patients time from admission to surgery was over four hours. Early laparotomy was performed in all patients. Overall morbidity was 23%, and mortality was 1.3%. Stab wounds account for more than 50% of penetrating abdominal wounds in most series.

15-3826 N

Sturim, H. S.
SURGICAL MANAGEMENT OF TRAUMATIC TRANSECTION OF THE PANCREAS: Review of nine cases and literature review.
Washington Univ. School of Medicine, Dept. of Surgery, St. Louis, Missouri. March 1966. 5 p. tables. fig. ref.
Annals of Surgery, Vol. 163, No. 3, March 1966, pp. 399-407.

WSD Surgery, Medical, Methods
OAE Abdomen, Anatomy/Body, Biomedical Aspect
YCC State-of-the-Art, Nature of Study, Study-Report Type
YEE Reviews, Contents

Article contains case summarizations of 47 cases collected from literature covering the years 1827 to 1965. Very high incidence of recovery in cases from year 1905 on. New clinical material consists of nine cases handled between 1950 and 1965. Time from injury to surgery is included in table. Text points up difficulties in diagnosis, particularly where wound is non-penetrating. Automobile is chief cause. Surgery reduces risks of pancreatic complication but may not be feasible in critical cases.

15-3827 N

Sizer, J. S./ Wayne, E. R./ Frederick, P. L.
DELAYED RUPTURE OF THE SPLEEN: Review of the literature and report of six cases.
March 1966. 3 p. illus. ref.
Archives of Surgery, Vol. 92, March 1966, pp. 362-366.

JNE Contusion/Crushing, Injury/Trauma, Accident

OAJN Spleen, Digestive System/Alimentary Tract, Anatomy/Body, Biomedical Aspect
YCK Case Studies, Nature of Study, Study-Report Type
YCC State-of-the-Art
WSC Diagnosis, Medical, Methods
OAE Abdomen
JNK Hemorrhage

Contains comprehensive review of 306 cases reported in English literature since 1866. Details are given for six additional cases. Frequency, latent period, mortality and associated injuries are discussed.

15-3842 S

Tomskey, G. C./ Schlottman, G. C./ Mardis, H. K.
INJURIES OF THE KIDNEY.
Louisiana State Univ., School of Medicine, Dept. of Urology, New Orleans. June 1965. 11 p. figs.
G.P., Vol. 31, No. 6, June 1965, pp. 78-88.

JNG Laceration/Openwound, Injury/Trauma, Accident
OAMB Kidneys, Urogenital System, Anatomy/Body, Biomedical Aspect
WSD Surgery, Medical, Methods
JNE Contusion/Crushing
WSC Diagnosis
YEF Data Statistics, Contents, Study-Report Type
YCK Case Studies, Nature of Study

Reviews diagnosis, treatment, and results of 207 patients with primary renal injury. Primary cause was penetrating wound in 44 patients and blunt trauma in 163. Recommends exploration of all penetrating wounds immediately after initial X-ray evaluations, and conservative management of nonpenetrating trauma except in event of uncontrollable hemorrhage, infection, or urinary extravasation. Five case reports illustrate conservative management.

15-3860 N

Dorton, H. E.
COMPLETE DIVISION OF THE COMMON BILE DUCT DUE TO BLUNT ABDOMINAL TRAUMA: Case report.
May 1965. 2 p. ref.
The American Surgeon, Vol. 31, No. 5, May 1965, pp. 333-335.

JNE Contusion/Crushing, Injury/Trauma, Accident
OAE Abdomen, Anatomy/Body, Biomedical Aspect
OAJM Liver/Biliary Tract, Digestive System/Alimentary Tract
YCK Case Studies, Nature of Study, Study-Report Type

Article focuses on one case, giving symptoms and delay from time of injury to operation and describing technique of repair and clinical course.

15-3865 N

Mueller, C. B.
THE MECHANISM OF ACUTE RENAL FAILURE AFTER INJURY AND TRANSFUSION REACTION AND ITS PREVENTION BY SOLUTE DIURESIS.
New York State Univ., Upstate Medical Center, Dept. of Surgery, Syracuse. April 1965. 6 p. ref.

BIBLIOGRAPHY

Surgical Clinics of North America, Vol. 45, April 1965, pp. 499-508.

Grant No: A-01393.

Sponsor: Public Health Service, Institute of Arthritis and Metabolism.

JN Injury/Trauma, Accident
OAMB Kidneys, Urogenital System, Anatomy/Body, Biomedical Aspect
YER General Discussions, Contents, Study-Report Type

After a brief state-of-the-art discussion mechanism of failure is given. Due to infrequency of occurrence, experimental models were employed to conclude that tubular obstruction by casts and cell debris causes "lower nephron nephrosis." Solute diuresis and several actions of mannitol, including its clinical use in emergencies, are described.

15-3866 S

Willox, G. L.

NONPENETRATING INJURIES OF ABDOMEN CAUSING RUPTURE OF SPLEEN: Report of 100 cases. April 1965. 3 p.

Archives of Surgery, Vol. 90, April 1965, pp. 498-502. Conference: Western Surgical Association, 72nd annual, 19-21 Nov. 1964, Colorado.

JNE Contusion/Crushing, Injury/Trauma, Accident
OAJN Spleen/Lymph Tracts, Digestive System/Alimentary Tract, Anatomy/Body, Biomedical Aspect
OAE Abdomen
YEF Data Statistics, Contents, Study-Report Type
VN Epidemiology, Disciplines
WSC Diagnosis, Medical, Methods
WSD Surgery

Gives etiology of 100 patients with rupture of spleen resulting chiefly from automobile accidents. Mortality was 17%. Clinical diagnosis was based on history of injury, evidence of peritoneal irritation, and shock. Diagnostic aids listed are absence of bowel sounds, rise in white blood count, abdominal paracentesis, and X ray. Treatment is removal of spleen, even for smallest tears. Delayed primary rupture occurred in 19% of cases.

15-3867 N

Cornell, W. P./ Ebert, P. A./ Zuidema, G. D.

X-RAY DIAGNOSIS OF PENETRATING WOUNDS OF THE ABDOMEN: Preliminary report.

Johns Hopkins Univ. School of Medicine. April 1965. 2 p. figs.

Journal of Surgical Research, Vol. V., No. 4, April 1965, pp. 142-145.

JNG Laceration/Openwound, Injury/Trauma, Accident
OAE Abdomen, Anatomy/Body, Biomedical Aspect
WSC Diagnosis, Medical, Methods
YER General Discussions, Contents, Study-Report Type
WSX X Ray

Study strongly suggests that surgery and its risks may be dispensed with through diagnosis as to penetration of peritoneal cavity by X ray using contrast material. X rays revealed that 14 of 24 cases did not require surgery.

15-3879 S

Hanna, W. A./ Bell, D. M./ Cochran, W.

LIVER INJURIES IN NORTHERN IRELAND.

Feb. 1965. 5 p. chart. tables. ref.

British Journal of Surgery, Vol. 52, No. 2, Feb. 1965, pp. 99-106.

JNP Consequences, Injury/Trauma, Accident
OAJM Liver, Digestive System/Alimentary Tract, Anatomy/Body, Biomedical Aspect
YEF Data Statistics, Contents, Study-Report Type
YCC State-of-the-Art, Nature of Study
L Time
WSI Autopsy, Medical, Methods

Present findings of 112 autopsies and in clinical series of 48 patients, comparing experience and conclusions with those of other authors. In autopsy series, authors consider frequency and type of trauma responsible for injuries and seriousness of problem. In clinical series, discuss results of treatment and possible deficiencies in management, recommending surgery for all cases and technique of Wangenstein for emergency major resection.

15-3881 N

Fisher, P.

INJURY PRODUCED BY SEAT BELTS: Report of 2 cases.

May 1965. 2 p. ref.

Journal of Occupational Medicine, Vol. 7, No. 5, May 1965, pp. 211-212.

Conference: American Association of Automotive Medicine, annual, Oct. 1964, Louisville, Kentucky.

JN Injury/Trauma, Accident
DMDB Seat Belts, Restraint Systems, Auxiliaries/Accessories, Vehicle
YCK Case Studies, Nature of Study, Study-Report Type

Results given of extensive studies made on the use of restraining devices. Because of the increased use of restraining devices in automobiles, injuries attributable to the seat belt are more frequent.

Case report presented of two women injured in a Volkswagen, both wearing a three-point combination lap and diagonal belt. One received a misplaced fracture of the sternum, the other rib fractures and a ruptured spleen.

Author concludes full shoulder harness restraint is probably the best and recommends better, safer automobile design to enable proper installation of suitable restraining devices.

15-3882 S

THE PATHOLOGY OF PEDESTRIAN AUTOMOTIVE ACCIDENT VICTIMS. See 21-3882 S

15-3891 S

Fitzgerald, J. B./ Quast, D. C./ Beall, A. C., Jr./ De Bakey, M. E.

SURGICAL EXPERIENCE WITH 103 TRUNCAL SHOT-GUN WOUNDS.

Baylor Univ. College of Medicine, Cora and Webb Mading Dept. of Surgery, Houston, Texas/ Jefferson Davis General Hospital, Houston, Texas/ Ben Taub General Hospital, Houston, Texas. 1965. 7 p. tables. figs. ref.

Journal of Trauma, Vol. 5, 1965, pp. 72-84.

BIBLIOGRAPHY

Contract No: DA-49-007-MD-2523.
Grant No: HE-03137/ HE-5387.
Sponsor: Army Research and Development Command/
Public Health Service.
Conference: American Association for the Surgery of
Trauma, 24th annual, 1-3 Oct. 1964, Chicago, Illinois.

WSD Surgery, Medical, Methods
YEF Data Statistics, Contents, Study-Report Type
JNG Laceration/Openwound, Injury/Trauma,
Accident
OAE Abdomen, Anatomy/Body, Biomedical Aspect
L Time
JNX Multiple Severe Injuries
WSE Therapeutic

Patients alive on arrival at hospital were grouped by therapy: observation, observation and tube thoracostomy, general anesthesia with major procedure extrapleural or extraperitoneal, and general anesthesia with thoracotomy or laparotomy. For each group, authors tabulated average period of hospitalization, clinical shock on admission, volume of blood received, and operative procedure employed. Frequencies and mortality rates for major organs and organ systems injured, and frequencies of postoperative complications, initial and secondary operative procedures, and causes of death are given.

15-3899 N

Thal, A. P./ Wilson, R. F.
A PATTERN OF SEVERE BLUNT TRAUMA TO THE REGION OF THE PANCREAS.
Wayne State Univ., College of Medicine, Dept. of Surgery, Michigan/ Detroit Receiving Hospital, Michigan/ Dearborn Veterans Administration Hospital, Michigan. Oct. 1964. 4 p. figs. ref.
Surgery, Gynecology and Obstetrics, Vol. 119, Oct. 1964, pp. 773-778.
Grant No: AM 06385-02.
Sponsor: National Institutes of Health/ Michigan Heart Association/ Receiving Hospital Research Corp.

JNE Contusion/Crushing, Injury/Trauma, Accident
OAE Abdomen, Anatomy/Body, Biomedical Aspect
YCK Case Studies, Nature of Study, Study-Report Type
WSC Diagnosis, Medical, Methods
JNK Hemorrhage

Etiology of injury to head of pancreas is discussed. Management consists of removal of damaged head of pancreas and repair of biliary system, if possible. Three case reports of injury sustained by steering wheel are given.

15-3902 N

Hartmen, S. W./ Greaney, E. M., Jr.
TRAUMATIC INJURIES TO THE BILIARY SYSTEM IN CHILDREN.
Los Angeles Childrens Hospital, Dept. of Surgery, California. Aug. 1964. 4 p. figs. ref.
American Journal of Surgery, Vol. 108, Aug. 1964, pp. 150-156.
Conference: Pacific Coast Surgical Association, annual, 9-12 Feb. 1964, San Francisco, California.

OAJM Liver/Biliary Tract, Digestive System/

Alimentary Tract, Anatomy/Body, Biomedical Aspect
EC Children, People
JN Injury/Trauma, Accident
YCK Case Studies, Nature of Study, Study-Report Type
WSC Diagnosis, Medical, Methods

Give 5 case reports. Discuss delay in diagnosis and use of operative cholangiography.

15-3908 S

Killen, D. A.
INJURY OF THE SUPERIOR MESENTERIC VESSELS SECONDARY TO NONPENETRATING ABDOMINAL TRAUMA.
DeWitt Army Hospital, Surgical Service, Fort Belvoir, Virginia. May 1964. 4 p. tables. ref.
The American Surgeon, Vol. 30, No. 5, May 1964, pp. 306-312.

JNE Contusion/Crushing, Injury/Trauma, Accident
OAE Abdomen, Anatomy/Body, Biomedical Aspect
YCK Case Studies, Nature of Study, Study-Report Type
YCC State-of-the-Art
YEC Bibliography, Contents
WSD Surgery, Medical, Methods

Author discusses rarity of this injury, giving two case reports and summarizing literature. 1320 cases from 11 studies are tabulated by organs injured. The most frequently injured organs were spleen, kidney, and liver; major vessels most often injured were the vena cava, renal artery, and superior mesenteric artery and vein. A separate table shows reference, age, sex, mechanism of injury, time treated, operative findings and procedures, and complications for seven case reports found in the literature.

15-3914 S

Hermann, R. E./ Hubay, C. A.
PERFORATING INJURY OF THE SMALL INTESTINE: Mechanisms of injury and factors affecting mortality.
Cleveland Clinic Foundation, Ohio/ Cleveland University Hospitals, Ohio. Feb. 1964. 3 p. tables. ref.
Archives of Surgery, Vol. 88, Feb. 1964, pp. 290-294.

JNG Laceration/Openwound, Injury/Trauma, Accident
OAE Abdomen, Anatomy/Body, Biomedical Aspect
OAJK Small Intestine, Digestive System/Alimentary Tract
YEF Data Statistics, Contents, Study-Report Type
VN Epidemiology, Disciplines

Fifty consecutive cases were studied. Age distribution, incidence of associated injuries, time from injury to operative repair and associated number of deaths, and mechanisms of perforation are tabulated. Morbidity associated with injuries was primarily due to infection or intestinal obstruction.

15-3915 S

Currie, R. A./ Watne, A. L./ Heiskell, E. F., Jr./ Gerwig, W. H., Jr.
BLUNT ABDOMINAL TRAUMA.

BIBLIOGRAPHY

West Virginia Univ. Medical Center, Dept. of Surgery, Morgantown. Feb. 1964. 8 p. fig. tables. ref.
American Journal of Surgery, Vol. 107, Feb. 1964, pp. 321-328.

JNE Contusion/Crushing, Injury/Trauma, Accident
OAE Abdomen, Anatomy/Body, Biomedical Aspect
YEF Data Statistics, Contents, Study-Report Type
VN Epidemiology, Disciplines
JNX Multiple Severe Injuries
JNH Fracture
WSD Surgery, Medical, Methods
WSC Diagnosis

Reviews hospital records of twenty-nine patients with clinical or autopsy diagnoses of blunt abdominal trauma, discussing etiology of trauma. Tabulates types of abdominal injury, other soft tissue injuries, fractures, and surgery performed for twelve patients with multiple injuries. Diagnostic aids are discussed.

15-3929 N

Hurwitt, E. S./ Silver, C. E.
SEAT-BELT HERNIA: A ventral hernia following an automobile crash.
Montefiore Hospital and Medical Center, Surgical Div., New York. 15 Nov. 1965. 3 p. figs. ref.
American Medical Association. Journal, Vol. 194, No. 7, 15 Nov. 1965, pp. 829-831.

DMDB Seat Belts, Restraint Systems, Auxiliaries/Accessories, Vehicle
OAE Abdomen, Anatomy/Body, Biomedical Aspect
JNE Contusion/Crushing, Injury/Trauma, Accident
YCK Case Studies, Nature of Study, Study-Report Type

Authors describe a rare type of injury and assume that it will be more common in the future. Case report included.

15-3967 S

Nietlispach, L.
BESONDERHEITEN BEIM STUMPFEN BAUCHTRAUMA. [SPECIAL FEATURES OF BLUNT ABDOMINAL TRAUMA.]
Aarau Chirurgischen Klinik des Kantonsspitals (Germany). 1965. 6 p. tables. ref.
Gastroenterologia, Vol. 103, No. 4, 1965, pp. 209-219.

OAE Abdomen, Anatomy/Body, Biomedical Aspect
JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
WSD Surgery, Medical, Methods
YEF Data Statistics, Contents, Study-Report Type
JNP Consequences/Complications

Author's experience with 118 patients is discussed, giving details of frequency of various organ injuries, number of cases that had surgery, and complications. Case reports are discussed. Of the cases treated conservatively some had unrecognized organic injuries causing late complications.

15-3976 S

DER TÖDLICHE VERKEHRSUNFALL AUS DER

SICHT DES PATHOLOGEN. [THE FATAL TRAFFIC ACCIDENT FROM THE PATHOLOGIST'S VIEW-POINT.] See 23-3976 S

15-3991 S

Maurer, G./ Schäfer, H.
DAS STUMPFE BAUCHTRAUMA. [BLUNT ABDOMINAL TRAUMA.]
München Städtischen Krankenhauses, Chirurgischen Klinik (Germany). June 1965. 5 p. graphs. ref.
Chirurg, Vol. 36, June 1965, pp. 263-267.

OAE Abdomen, Anatomy/Body, Biomedical Aspect
JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
YEF Data Statistics, Contents, Study-Report Type
VN Epidemiology/Etiology, Disciplines
WSC Diagnosis, Medical, Methods
JNK Hemorrhage

Of 71,800 surgical patients treated from 1957-1964, there were 217 cases of blunt abdominal trauma. Authors discuss etiology of trauma and give frequency of injuries to different organs. Discuss in detail injuries to spleen, liver, large and small intestine, and retroperitoneal organs; compare number of cases treated conservatively to number of surgical procedures, with indication of results.

15-4005 S

Moss, L. K./ Schmidt, F. E./ Creech, O., Jr.
ANALYSIS OF 500 STAB WOUNDS OF THE ABDOMEN.
Tulane Univ. School of Medicine, Dept. of Surgery, New Orleans, Louisiana/ Charity Hospital, New Orleans, Louisiana. July 1962. 4 p. tables. figs. graphs. ref.
American Surgeon, Vol. 28, July 1962, pp. 483-489.

OAE Abdomen, Anatomy/Body, Biomedical Aspect
JNG Laceration/Openwound/Penetrating, Injury/Trauma, Accident
YEF Data Statistics, Contents, Study-Report Type

Authors found incomplete correlation between pre-operative clinical evaluation and findings at operation. Concluded that early abdominal exploration is the only reliable index of intraperitoneal penetration and injury.

All cases underwent abdominal exploration and were divided into four categories by degree and extent of injury. Data include: incidence of shock, peritonitis, evisceration, postoperative complications and mortality rate (for each category), incidence of age, sex, race, wounding agents, wound sites, organ injury, intraperitoneal penetration, intraperitoneal injury and etiology of shock (for entire group).

Mortality rate was 1.1%.

15-4022 S

Wilson, H./ Sherman, R.
CIVILIAN PENETRATING WOUNDS OF THE ABDOMEN. I. Factors in mortality and differences from military wounds in 494 cases.
Tennessee Univ., Div. of Surgery, Memphis. May 1961. 6 p. tables. ref.
Annals of Surgery, Vol. 153, No. 5, May 1961, pp. 639-649.
Conference: Southern Surgical Association, 6-8 Dec. 1960, Boca Raton, Florida.

BIBLIOGRAPHY

JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
OAE Abdomen, Anatomy/Body, Biomedical Aspect
JNX Multiple Severe Injuries
YEF Data Statistics, Contents, Study-Report Type
WSC Diagnosis, Medical, Methods

Authors conclude that civilian cases are not entirely comparable to those reported in military series. Recommend further studies of civilian series and appropriate revision of military standards of treatment. Data statistics: age, sex, race, and type of wound; mortality and type of wound (treated cases); mortality and laparotomy (no perforation found); value of X ray in diagnosis; accuracy of diagnosis and results (no laparotomy); etiology and mortality; number organs injured and mortality; organ injured and mortality; causes of death.

15-4028 S

Fitzgerald, J. B./ Crawford, E. S./ De Bakey, M. E.
SURGICAL CONSIDERATIONS OF NON-PENETRATING ABDOMINAL INJURIES. An analysis of 200 cases.
Baylor Univ., College of Medicine, Cora and Webb Mading Dept. of Surgery, Houston, Texas/ Jefferson Davis General Hospital, Houston, Texas. July 1960. 4 p. tables. ref. *American Journal of Surgery*, Vol. 100, July 1960, pp. 22-29.

JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
OAE Abdomen, Anatomy/Body, Biomedical Aspect
WSD Surgery, Medical, Methods
VN Epidemiology/Etiology, Disciplines
YEF Data Statistics, Contents, Study-Report Type
WSE Therapeutic
JNK Hemorrhage

Covers 100 patients dead on arrival and 100 patients alive on admission to hospital, 97% and 70%, respectively, with multiple injuries, and 83.5% injured in motor vehicle accidents. Authors discuss method and type of injury, condition of survivors on admission, treatment, and results; they conclude, generally, that prognosis is poor. Suggest that the greatest opportunity for life saving procedures lies in prevention. Data statistics: type of trauma; abdominal organs injured and mortality; associated injuries and mortality.

15-4035 N

Hill, R. M.
ABDOMINAL INJURIES.
Cumberland Infirmary, Carlisle (England). June 1964. 4 p. tables. ref. *The Practitioner*, Vol. 192, June 1964, pp. 766-773.

OAE Abdomen, Anatomy/Body, Biomedical Aspect
JNX Multiple Severe Injuries, Injury/Trauma, Accident
JNPL Shock, Consequences/Complications

General discussion emphasizes that traffic, industrial, and agricultural accidents where abdominal injury is suspected require admission to hospital. Briefly reviews literature as to frequency of injury for various abdominal sites. Diagnosis and treatment are briefly indicated for some injuries.

15-4044 S

Spadaro, G.
LE LESIONI DELLA MILZA NEI TRAUMI CHIUSI ED APERTI DELL'ADDOME: Considerazioni su 91 casi. [LESIONS OF THE SPLEEN IN CLOSED AND OPEN TRAUMAS OF THE ABDOMEN: Considerations of 91 cases.]
1959. 11 p. tables. graphs. figs. ref. *Annali Italiani di Chirurgia*, Vol. 36, 1959, pp. 129-149.

JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
JNG Laceration/Openwound/Penetrating
OAJN Spleen/Lymph Tracts, Digestive System/Alimentary Tract, Anatomy/Body, Biomedical Aspect
YEF Data Statistics, Contents, Study-Report Type
YCC State-of-the-Art, Nature of Study
WSC Diagnosis, Medical, Methods
WSD Surgery

Modes of injury are discussed: direct impact on splenic region, direct impact on abdomen in general, indirect trauma from falls, etc. 79 cases of blunt trauma, and 12 cases of penetrating trauma are tabulated giving the following: date, sex, age, pre-operative diagnosis, description of spleen injury, type of surgery, and results. A frequency distribution and mortality figures by age are given. Cases of associated injuries to other organs are described, including mortality and causes of death.

Details of the splenic injury and their frequencies are given. Symptoms and diagnosis are discussed. Author includes a state-of-the-art survey, with number of cases and mortality.

15-4046 N

COMBINED RENAL AND RESPIRATORY FAILURE AFTER TRAUMA. See 23-4046 N

15-4047 S

Stephens, F. O./ Hollings, R. M.
CLOSED ABDOMINAL INJURIES: An analysis of 168 consecutive cases with particular reference to diagnostic problems.
Sydney Univ. (Australia)/ Royal North Shore Hospital, Sydney (Australia). 3 Aug. 1963. 4 p. graph. tables. ref. *Medical Journal of Australia*, Vol. 2, 3 Aug. 1963, pp. 173-176.

JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
OAE Abdomen, Anatomy/Body, Biomedical Aspect
WSC Diagnosis, Medical, Methods
YEF Data Statistics, Contents, Study-Report Type

Authors list and discuss causes of diagnostic difficulty. Describe essential and ancillary diagnostic methods. Present 5 case reports to illustrate the use of paracentesis. Analyze the 43 fatal cases with respect to type of accident, time of death, presence of multiple injuries, and diagnostic difficulties. Note that road accidents accounted for 74%. Present data which show the overall road accident picture.

15-4051 S

Hellström, G.
LESIONS ASSOCIATED WITH CLOSED LIVER INJURY: A clinical study of 192 fatal cases.

BIBLIOGRAPHY

Uppsala Univ., Akademiska Sjukhuset, Dept. of Surgery (Sweden). 1966. 8 p. tables. ref.
Acta Chirurgica Scandinavica, Vol. 131, 1966, pp. 460-475.

OAJM Liver/Biliary Tract, Digestive System/
Alimentary Tract, Anatomy/Body, Biomedical
Aspect
JNE Contusion/Crushing/Blunt, Injury/Trauma,
Accident
YEF Data Statistics, Contents, Study-Report Type
YCC State-of-the-Art, Nature of Study
VN Epidemiology/Etiology, Disciplines

Author notes that the mortality in nonpenetrating wounds of the liver is higher than that in rupture of the spleen. Presents data from several literature sources.

Analyzes 192 fatal cases of closed liver injury with respect to sex, age, survival time, accident situation, extent of liver trauma, and associated injuries. Discusses the possible role of liver trauma in producing lesions in other parts of the body, and possible causes of death when no lethal injury is apparent at autopsy.

Includes some case histories and an excellent literature review.

15-4052 N

Jenkins, S. G., Jr.
MANAGEMENT OF BLUNT ABDOMINAL TRAUMA.
Sept. 1965. 5 p. tables. ref.
North Carolina Medical Journal, Vol. 26, Sept. 1965, pp. 391-395.

OAE Abdomen, Anatomy/Body, Biomedical Aspect
JNE Contusion/Crushing/Blunt, Injury/Trauma, Ac-
cident
JNK Hemorrhage
WSC Diagnosis, Medical, Methods
WSD Surgery

Author reviews literature and discusses mechanism of injury; diagnosis; delayed abdominal hemorrhage; mortality; and treatment.

15-4054 S

Kleinert, H. E./ Romero, J.
**BLUNT ABDOMINAL TRAUMA: Review of cases ad-
mitted to a general hospital over a 10 year period.**
Louisville Univ., School of Medicine, Dept. of Surgery,
Kentucky/ Louisville General Hospital, Kentucky. 1961.
8 p. tables. ref.
Journal of Trauma, Vol. 1, 1961, pp. 226-240.
Conference: American Association for the Surgery of
Trauma, 19th annual, 24-26 Sept. 1959, Bretton Woods,
New Hampshire.

JNE Contusion/Crushing/Blunt, Injury/Trauma, Ac-
cident
OAE Abdomen, Anatomy/Body, Biomedical Aspect
YEF Data Statistics, Contents, Study-Report Type
VN Epidemiology/Etiology, Disciplines
OAJN Spleen/Lymph Tracts, Digestive System/
Alimentary Tract
OAJM Liver/Biliary Tract
OAMB Kidneys, Urogenital System
OAMC Bladder
NKFB Reaction Time, Frequency/Time, Operating
Conditions, Physical Aspect

WSC Diagnosis, Medical, Methods
WSE Therapeutic

Authors review results of 161 patients with 24% mortality in effort to determine better means for early diagnosis. List etiological factors and organs injured, and discuss diagnostic criteria and treatment for different organs. Cystogram, intravenous pyelogram, and retrograde pyelogram were most useful laboratory aids.

15-4064 S

**PELVIC FRACTURES: Associated intestinal and me-
senteric lesions.** See 16-4064 S

15-4073 S

Carlton, C. E., Jr./ Scott, R., Jr.
**PENETRATING RENAL INJURIES: An analysis of 100
cases.**
Baylor Univ. College of Medicine, Cora and Webb Mading
Dept. of Surgery, Houston, Texas. Nov. 1960. 3 p. tables.
figs.
Journal of Urology, Vol. 84, No. 5, Nov. 1960, pp.
599-603.
Conference: American Urological Association, Inc.,
annual, 16-19 May 1960, Chicago, Illinois.

JNG Laceration/Openwound/Penetrating, Injury/
Trauma, Accident
OAMB Kidneys, Urogenital System, Anatomy/Body,
Biomedical Aspect
WSC Diagnosis, Medical, Methods
WSE Therapeutic
JNP Consequences/Complications

Authors recommend excretory urography and exploratory laparotomy as diagnostic procedures. Recommend surgical treatment. Note that hematuria was not found in 20%. Data statistics: mode of injury; incidence of hematuria; symptoms and physical findings; results of plain film of abdomen; results of excretory urography; types of treatment and complications; incidence of associated injuries.

15-4082 S

Olinde, H. D. H.
**NONPENETRATING WOUNDS OF THE ABDOMEN: A
report of 47 cases with review of the literature.**
Confederate Memorial Medical Center, Shreveport,
Louisiana. Oct. 1960. 7 p. tables. ref.
Southern Medical Journal, Vol. 53, Oct. 1960, pp.
1270-1282.

JNE Contusion/Crushing/Blunt, Injury/Trauma, Ac-
cident
YCC State-of-the-Art, Nature of Study, Study-
Report Type
OAE Abdomen, Anatomy/Body, Biomedical Aspect
VN Epidemiology/Etiology, Disciplines

Reviews cases admitted to hospital over 5-year period, comparing frequency of causes with that found by other researchers. In this series, 4.3% were auto-pedestrian accidents and 48.9% were auto-collisions. Discusses injuries to various organ systems and to specific organs, factors affecting extent of injury, immediate management, indications for operations, anesthesia, and post-operative management.

BIBLIOGRAPHY

15-4084 S

Crosthwait, R. W./ Allen, J. E./ Murga, F./ Beall, A. C., Jr./ DeBakey, M. E.
THE SURGICAL MANAGEMENT OF 640 CONSECUTIVE LIVER INJURIES IN CIVILIAN PRACTICE.
Baylor Univ. College of Medicine, Cora and Webb Mading Dept. of Surgery, Houston, Texas/ Jefferson Davis General Hospital, Houston, Texas. June 1962. 3 p. tables. ref. *Surgery, Gynecology and Obstetrics*, Vol. 114, June 1962, pp. 650-654.
Grant No: H-3137/ HTS-5387.
Sponsor: Houston Heart Association, Texas/ Texas Heart Association/ Public Health Service.

WSD Surgery, Medical, Methods
OAJM Liver/Biliary Tract, Digestive System/ Alimentary Tract, Anatomy/Body, Biomedical Aspect
WSI Autopsy/Pathology
JNX Multiple Severe Injuries, Injury/Trauma, Accident
JNP Consequences/Complications

Study covers period 1939-1961. First 300 cases previously reported. Authors describe and discuss incidence, type of injury, associated injuries, management and surgical technique, results, causes of death, and complications. Attribute marked decrease in mortality rate to adequate use of massive whole blood transfusions and surgical intervention. Note that incidence of blunt trauma has increased. Correlate number of associate organs injured and mortality. Mortality highest for blunt trauma (as compared to stab wound and gunshot wound).

15-4101 N

Blumenberg, R. M.
THE SEAT BELT SYNDROME: Sigmoid colon perforation.
Army Hospital Ryukyu Islands, Dept. of Surgery. April 1967. 2 p. ref.
Annals of Surgery, Vol. 165, No. 4, April 1967, pp. 637-639.

DMDB Seat Belts, Restraint Systems, Auxiliaries/ Accessories, Vehicle
OAE Abdomen, Anatomy/Body, Biomedical Aspect
JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
JNP Consequences/Complications
YCK Case Studies, Nature of Study, Study-Report Type

Discusses nature and mechanisms of intra-abdominal and pelvic visceral and mesenteric injuries incurred while wearing a seat belt. Case of perforation of sigmoid colon following seat belt injury is reported.

15-4103 N

LeMire, J. R./ Earley, D. E./ Hawley, C.
INTRA-ABDOMINAL INJURIES CAUSED BY AUTOMOBILE SEAT BELTS.
Christ Hospital, Dept. of Radiology, Cincinnati, Ohio. 4 Sept. 1967. 3 p. ref.
American Medical Association Journal, Vol. 201, No. 10, 4 Sept. 1967, pp. 735-737.

JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident

DMDB Seat Belts, Restraint Systems, Auxiliaries/ Accessories, Vehicle
OAE Abdomen, Anatomy/Body, Biomedical Aspect
JNP Consequences/Complications
YCK Case Studies, Nature of Study, Study-Report Type

Summarizes the only 23 cases reported in the literature on intra-abdominal injury due to lap-type or chest-harness automobile safety belts. Reports are made on two additional cases. Intra-abdominal injury associated with wearing a seat belt is often unrecognized when patient is first seen. Any of the abdominal viscera may be involved.

15-4106 S

Wilson, C. B./ Vidrine, A., Jr./ Rives, J. D.
UNRECOGNIZED ABDOMINAL TRAUMA IN PATIENTS WITH HEAD INJURIES.
Louisiana State Univ., New Orleans, School of Medicine, Dept. of Surgery/ Louisiana State Univ., New Orleans, Surgical Service, Charity Hospital. 1965. 3 p. tables. figs. ref.
Annals of Surgery, Vol. 161, No. 4, April 1965, pp. 608-613.

WSC Diagnosis, Medical, Methods
OAE Abdomen, Anatomy/Body, Biomedical Aspect
OAI Head
YEF Data Statistics, Contents, Study-Report Type
JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
JNPL Shock, Consequences/Complications

Authors review findings for 363 patients with abdominal trauma (91 with concomitant head injuries). Note coexistence of abdominal and head injuries is a particularly lethal combination. Discuss and describe factors in mismanagement of patients with such injuries. Data statistics (with respect to absence or presence of head injuries): incidence of coma and shock; incidence of shock in presence of associated injuries; frequency and results of paracentesis.

15-4119 S

FATAL TRAFFIC ACCIDENTS IN BRISBANE FROM 1935 TO 1964. See 21-4119 S

15-4126 S

Shaftan, G. W./ Gliedman, M. L./ Cappelletti, R. R.
INJURIES OF THE LIVER: A review of 111 cases.
Kings County Hospital Center, Brooklyn, New York/ New York State Univ., Brooklyn Downstate Medical Center, Dept. of Surgery. Jan. 1963. 7 p. tables. ref.
Journal of Trauma, Vol. 3, No. 1, Jan. 1963, pp. 63-75.
Conference: American Association for the Surgery of Trauma, 20th annual, 5-7 Oct. 1960, Coronada, California.

JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
JNG Laceration/Openwound/Penetrating
OAJM Liver/Biliary Tract, Digestive System/ Alimentary Tract, Anatomy/Body, Biomedical Aspect
VN Epidemiology/Etiology, Disciplines
YEF Data Statistics, Contents, Study-Report Type
WSE Therapeutic, Medical, Methods
WSI Autopsy/Pathology

BIBLIOGRAPHY

All patients were alive on admission to hospital. Authors discuss diagnosis, complications, associated injuries, treatment, and mortality. Analyze the relationship of mortality to various factors. Describe and discuss management procedures followed in this hospital. Emphasize importance of adequate resuscitation, diagnosis, and drainage. Data statistics: age; race; sex; mortality; degree, incidence of shock; number of organs injured; extra-abdominal injuries; hemoperitoneum; type, extent of liver injury; principal causes of death. Discussion follows article.

15-4131 S

Sturim, H. S.
THE SURGICAL MANAGEMENT OF PANCREATIC INJURIES.
Washington Univ. School of Medicine, Dept. of Surgery, St. Louis, Missouri/ Veterans Administration Hospital, St. Louis, Missouri. 1965. 6 p. tables. ref.
Journal of Trauma, Vol. 5, No. 6, 1965, pp. 693-702.

JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
JNG Laceration/Openwound/Penetrating
OAJP Pancreas, Digestive System/Alimentary Tract, Anatomy/Body, Biomedical Aspect
WSD Surgery, Medical, Methods
WSE Therapeutic
JNP Consequences/Complications
VN Epidemiology/Etiology, Disciplines
YEF Data Statistics, Contents, Study-Report Type

Author reviews 40 cases. Discusses mechanism of injury, diagnosis, surgical management, associated injuries and complications. Data statistics: type of wound and mortality; mortality and associated injuries; type of wound and associated injuries; method of treatment; complications. Brief case summaries of six fatalities.

15-4132 N

Williams, J. S./ Lies, B. A., Jr./ Hale, H. W., Jr.
THE AUTOMOTIVE SAFETY BELT: In saving a life may produce intra-abdominal injuries.
Rochester Univ., School of Medicine and Dentistry, New York/ New York State Univ., Buffalo, 1966. 7 p. tables. figs. ref.
Journal of Trauma, Vol. 6, No. 3, 1966, pp. 303-315.
Conference: American Association for the Surgery of Trauma, 25th annual, 14-16 Oct. 1965, Philadelphia, Pennsylvania.

JN Injury/Trauma, Accident
DMDB Seat Belts, Restraint Systems, Auxiliaries/Accessories, Vehicle
DMDC Shoulder Harnesses
OAE Abdomen, Anatomy/Body, Biomedical Aspect
YCK Case Studies, Contents, Study-Report Type

Discussion in detail of four case reports of injury from lap-type seat belt.

Present also two tables, comparing findings by various authors on situation of accident, symptoms and physical findings, timing of operation after injury, pathology, and course. One table is for lap-type safety belt, the other for shoulder type. Discuss mechanism of abdominal injuries by lap belts and by shoulder belts.

15-4144 S

Thompson, R. J., Jr./ Hinshaw, D. B.
PANCREATIC TRAUMA: Review of 87 cases.
Loma Linda Univ., School of Medicine, Dept. of Surgery, California/ Los Angeles County Hospital, California. Jan. 1966. 5 p. charts. figs. ref. tables.
Annals of Surgery, Vol. 163, No. 1, Jan. 1966, pp. 153-160.
Conference: American College of Surgeons, Southern California Chapter, 24 Jan. 1965.

JN Injury/Trauma, Accident
OAJP Pancreas, Digestive System/Alimentary Tract, Anatomy/Body, Biomedical Aspect
VN Epidemiology/Etiology, Disciplines
YEF Data Statistics, Contents, Study-Report Type
WSE Therapeutic, Medical, Methods

Authors present data and discuss diagnosis, factors which influence the mortality rate, and surgical management. Note that pancreatic trauma is becoming more common. Data statistics: mechanism of injury and mortality; associated injuries and mortality; mortality, age and sex; types of associated injuries; cause of death; mortality and location of injury; pancreatic complications; method of treatment and mortality.

15-4146 S

Pridgen, J. E./ Herff, A. F., Jr./ Watkins, H. O./ Halbert, D. S./ d'Avila, R./ Crouch, D. M./ Prud'homme, J. L.
PENETRATING WOUNDS OF THE ABDOMEN: Analysis of 776 operative cases.
Texas Univ., San Antonio, Dept. of Surgery. June 1967. 4 p. figs. ref. tables.
Annals of Surgery, Vol. 165, No. 6, June 1967, pp. 901-907.
Conference: Southern Surgical Association, annual, 6-8 Dec. 1966, Boca Raton, Florida.

WSD Surgery, Medical, Methods
JNG Laceration/Openwound/Penetrating, Injury/Trauma, Accident
OAE Abdomen, Anatomy/Body, Biomedical Aspect
VN Epidemiology/Etiology, Disciplines
YEF Data Statistics, Contents, Study-Report Type
WSI Autopsy/Pathology

Authors compare findings in two series (1950-57 and 1957-66). Earlier series previously reported. Discuss incidence and treatment of gastrointestinal wounds; surgical management of wounds to liver, pancreas, and the vascular system. Describe total patient care and emphasize the advantages of complete preoperative care in the emergency ward and operating room. Data statistics: age; sex; race; type of wound and blood utilized; wounds of gastrointestinal tract; wounds of hollow viscera; wounds of solid viscera; vascular injuries, treatment and result; causes of death.

15-4147 S

Wilson, D. H.
INCIDENCE, AETIOLOGY, DIAGNOSIS, AND PROGNOSIS OF CLOSED ABDOMINAL INJURIES: A study of 265 consecutive cases.
Leeds General Infirmary, Casualty Dept. (England). Jan. 1963. 5 p. tables. ref.
British Journal of Surgery, Vol. 50, Jan. 1963, pp. 381-389.

Sponsor: Leeds General Infirmary, Board of Governors (England).

VN Epidemiology/Etiology, Disciplines
WSC Diagnosis, Medical, Methods
OAE Abdomen, Anatomy/Body, Biomedical Aspect
JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
NKFF Delay, Frequency/Time, Operating Conditions, Physical Aspect

Author presents data and discusses findings. Discusses factors influencing diagnosis and prognosis in each type of closed abdominal injury. Suggests that further decrease in the mortality rate could be achieved by improved facilities for early diagnosis and use of recent improvements in resuscitation procedures. Data statistics: age; sex; type of accident and age; type of injury; treatment and mortality; final diagnosis of patients with abdominal wall injuries.

15-4149 S
MAJOR ABDOMINAL INJURIES ASSOCIATED WITH PELVIC FRACTURES. See 16-4149 S

15-4196 S
Allen, R. B./ Curry, G. J.
ABDOMINAL TRAUMA: A study of 297 consecutive cases.
Hurley Hospital, Section for the Surgery of Trauma, Flint, Michigan. March 1957. 7 p. tables. ref.
American Journal of Surgery, Vol. 93, March 1957, pp. 398-404.

JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
JNG Laceration/Openwound/Penetrating
OAE Abdomen, Anatomy/Body, Biomedical Aspect
NKFF Delay, Frequency/Time, Operating Conditions, Physical Aspect
YEF Data Statistics, Contents, Study-Report Type
VN Epidemiology/Etiology, Disciplines
WSD Surgery, Medical, Methods
JNPL Shock, Consequences/Complications

Authors analyze data and discuss etiology, types of injuries, associated injuries, shock, selection of patients for operation, morbidity, mortality and important factors in management. Data statistics: age; sex; mortality; type of injury; type of accident; treatment; degree of shock; interval between admission and operation; duration of hospitalization.

15-4198 S
Zabinski, E. J./ Harkins, H. N.
DELAYED SPLENIC RUPTURE: A clinical syndrome following trauma; report of four cases with an analysis of one hundred and seventy-seven cases collected from the literature.
Henry Ford Hospital, Div. of General Surgery, Detroit, Michigan. 1943. 14 p. tables. ref.
Archives of Surgery, Vol. 46, 1943, pp. 186-213.

JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
NKFF Delay, Frequency/Time, Operating Conditions, Physical Aspect

OAJN Spleen/Lymph Tracts, Digestive System/Alimentary Tract, Anatomy/Body, Biomedical Aspect
YCC State-of-the-Art, Nature of Study, Study-Report Type
YCK Case Studies
YEF Data Statistics, Contents
VN Epidemiology/Etiology, Disciplines

Authors analyze 70 cases in detail. Discuss incidence, initial injury, diagnosis, treatment, complications and mortality. Data statistics: age, sex; type of accident; length of latent period; pathologic changes.

15-4504 S
DIED IN HOSPITAL: A three-year study of deaths following trauma. See 21-4504 S

15-4506 S
Hellstrom, G.
CLOSED INJURY OF THE LIVER: Analysis of a series of 300 cases.
Uppsala Univ., Dept. of Surgery (Sweden). Dec. 1961. 6 p. figs. ref. tables.
Acta Chirurgica Scandinavica, Vol. 122, Dec. 1961, pp. 490-501.

OAJM Liver/Biliary Tract, Digestive System/Alimentary Tract, Anatomy/Body, Biomedical Aspect
YEF Data Statistics, Contents, Study-Report Type
VN Epidemiology/Etiology, Disciplines
JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
NKFF Delay, Frequency/Time, Operating Conditions, Physical Aspect
WSE Therapeutic, Medical, Methods
WSD Surgery

Author analyzes and discusses data from 20-year period. Reviews mortality compared to closed rupture of the spleen. Notes a striking increase in the incidence of this injury and consistently high mortality. Stresses the difficulty and importance of early diagnosis and proper surgical management. Does not recommend the use of gauze packing. Data statistics: mortality; age; sex; location and cause of injury; treatment; interval between admission and operation; postoperative course; other injuries; time of death.

15-4513 S
ÜBER DIE RIPPENSERIENFRAKTUREN DURCH VERKEHRSUNFÄLLE UND DEN DERZEITIGEN STAND IHRER BEHANDLUNG. [ON SERIAL RIB FRACTURES CAUSED BY TRAFFIC ACCIDENTS AND THE CURRENT STATUS OF THEIR TREATMENT.] See 24-4513 S

15-4542 S
Hung, C. R./ Tsai, T. C./ Kao, T. C.
NONPENETRATING ABDOMINAL INJURY: A report of 98 cases.
National Taiwan Univ., Dept. of Surgery, Taipei. 28 March 1962. 13 p. tables. figs. ref.
Formosan Medical Association Journal, Vol. 61, No. 3, 28 March 1962, pp. 292-317.

OAE Abdomen, Anatomy/Body, Biomedical Aspect
JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
VN Epidemiology/Etiology, Disciplines

Authors present and discuss data. Discuss mechanism of injury, condition of patient on admission, diagnosis, and treatment. Recommend early exploratory laparotomy on the basis of history of trauma and clinical findings. Data statistics: age and sex; causes of injuries; occupation; abdominal organ injured and mortality; extra-abdominal injuries and mortality.

16-2592 S

TRAFFIC INJURIES IN BRISBANE. Report of a general survey. See 01-2592 S

16-3705 S

AN ANALYSIS OF 950 FATAL INJURIES. See 25-3705 S

16-3710 S

CONCEALED HEMORRHAGE DUE TO PELVIC FRACTURE. See 24-3710 S

16-3728 S

AUTOPSY FINDINGS IN 127 PATIENTS FOLLOWING FATAL TRAFFIC ACCIDENTS. See 22-3728 S

16-3786 S

THE EFFECT OF SUBLINGUAL POTASSIUM HEPARIN (CLARIN) ON THE SERUM LIPASE ACTIVITY OF PATIENTS FOLLOWING FRACTURES. See 25-3786 S

16-3789 S

Eichenholtz, S. N./ Stark, R. M.
CENTRAL ACETABULAR FRACTURES: A review of thirty-five cases.
Veterans Administration Hospital, Bronx, New York/Hospital for Special Surgery, New York. June 1964. 11 p. figs. ref.
Journal of Bone and Joint Surgery, Vol. 46-A, No. 4, June 1964, pp. 695-714.
Conference: American Academy of Orthopaedic Surgeons, annual, 24 Jan. 1963, Miami Beach, Florida.

JNH Fracture, Injury/Trauma, Accident
OADH Pelvis, Lower Extremity, Anatomy/Body, Biomedical Aspect
WSD Surgery, Medical, Methods
WSE Therapeutic
YCK Case Studies, Nature of Study, Study-Report Type

Describe injury and results of treatment, with follow-up an average of four years after treatment. Review controversy found in literature over merits of open and closed treatment. Conclude that 75% of patients can achieve good results by closed treatment. Displaced noncomminuted fractures with intact femoral head may be suitable for open reduction and internal fixation. Gross interposed bone fragments and fracture of femoral head may require cup arthroplasty.

16-3790 S

Peltier, L. F.
COMPLICATIONS ASSOCIATED WITH FRACTURES OF THE PELVIS.

American Academy of Orthopaedic Surgeons/ Kansas Univ. Medical Center, Section of Orthopedic Surgery, Kansas City. July 1965. 5 p. ref. figs. tables.

Journal of Bone and Joint Surgery, Vol. 47-A, No. 5, July 1965, pp. 1060-1069.

JNP Consequences, Injury/Trauma, Accident
JNH Fracture
JNK Hemorrhage
OADH Pelvis, Lower Extremity, Anatomy/Body, Biomedical Aspect
OAM Urogenital System
OALF Diaphragm, Respiratory System
YEF Data Statistics, Contents, Study-Report Type
WSD Surgery, Medical, Methods

Discussion based on 186 patients with fractures of pelvis, 60% of which had additional injuries. Fractures were classified according to whether they affected weight-bearing. Highest mortality rate was among patients with bilateral fractures of pubic rami, central dislocations of hip, and fractures of hemipelvis. Management of intraperitoneal and intrapelvic retroperitoneal hemorrhage is discussed, and other rare complications are briefly dealt with. Cites conclusions of other authors concerning specific injuries and hemorrhage complicating pelvic fractures.

16-3882 S

THE PATHOLOGY OF PEDESTRIAN AUTOMOTIVE ACCIDENT VICTIMS. See 21-3882 S

16-4034 N

Sullivan, C. R.
FRACTURES OF THE PELVIS: Fundamentals of management.
Mayo Clinic, Section of Orthopedic Surgery, Rochester, Minnesota/ Mayo Foundation, Section of Orthopedic Surgery, Rochester, Minnesota. Jan. 1966. 11 p. figs. tables. ref.
Postgraduate Medicine, Vol. 39, Jan. 1966, pp. 45-55.

OADH Pelvis, Lower Extremity, Anatomy/Body, Biomedical Aspect
JNH Fracture, Injury/Trauma, Accident
WSE Therapeutic, Medical, Methods
JNP Consequences/Complications

Pelvic fracture per se is of less importance than the visceral damage almost invariably accompanying it. Text with illustrations describes five common nonoperative methods of handling. Operative treatment is discussed briefly. Complications are listed in table.

16-4050 S

MASSIVE HEMORRHAGE FROM PELVIC FRACTURES. See 24-4050 S

16-4064 S

Moore, J. R.
PELVIC FRACTURES: Associated intestinal and mesenteric lesions.

BIBLIOGRAPHY

July 1966. 5 p. tables. ref.
Canadian Journal of Surgery, Vol. 9, July 1966, pp. 253-261.

Sponsor: British Columbia Workmen's Compensation Board/ British Columbia Univ., Trauma Research Unit, Vancouver, British Columbia/ Vancouver General Hospital, British Columbia.

JNH Fracture, Injury/Trauma, Accident
OADH Pelvis, Lower Extremity, Anatomy/Body, Biomedical Aspect
OAJL Large Intestine, Digestive System/Alimentary Tract
JNG Laceration/Openwound/Penetrating
YEF Data Statistics, Contents, Study-Report Type
OAJK Small Intestine
WSC Diagnosis, Medical, Methods

Reports on 25 patients with intestinal perforation, with or without mesenteric laceration, and one with mesenteric laceration only. 58% mortality rate was partly because many accidents occurred at distant and relatively inaccessible sites. Reviews literature on pelvic injuries, emphasizing diagnosis of blunt intra-abdominal injury. Hemoglobin and hematocrit determinations, leukocyte counts, four-quadrant peritoneal tap, and radiographs cannot be relied upon for early diagnosis.

16-4075 N

Ahrer, E./ Marberger, H.
BECKENVERLETZUNGEN UND HARNTRAKTS-KOMPLIKATIONEN. [PELVIC INJURIES AND URINARY TRACT COMPLICATIONS.]
Innsbruck Universität, Chirurgischen Klinik (Germany).
Nov. 1959. 5 p. tables. figs. photos. ref.
Klinische Medizin, Vol. 14, Nov. 1959, pp. 565-572.

JNH Fracture, Injury/Trauma, Accident
OADH Pelvis, Lower Extremity, Anatomy/Body, Biomedical Aspect
OAM Urogenital System
JNP Consequences/Complications

Authors discuss etiology of trauma, and show frequency of occurrence of specific types of pelvic fracture. Mechanism of injury to genitourinary tract is explained with sketches and X rays. Frequency of transection of uretra, rupture of bladder, and complications is given for male and female patients in sample. Therapy and urgency of proper diagnosis is discussed.

16-4085 S

Chang, T. H./ Miyakawa, G./ Sunday, H. B.
COMPLICATED PELVIC FRACTURES (with case reports).
Charleston General Hospital, Dept. of Orthopedic and Traumatic Surgery, West Virginia. Jan. 1961. 9 p. photos. ref.
West Virginia Medical Journal, Vol. 57, No. 1, Jan. 1961, pp. 12-20.
Conference: American College of Surgeons, West Virginia Chapter, 1-2 April 1960, White Sulphur Springs, West Virginia.

JNH Fracture, Injury/Trauma, Accident
OADH Pelvis, Lower Extremity, Anatomy/Body, Biomedical Aspect
JNP Consequences/Complications

YCK Case Studies, Nature of Study, Study-Report Type

Authors present classification scheme for pelvic fractures and associated injuries. Describe and discuss diagnosis and treatment of pelvic fractures. Analyze 14/108 cases with associated injuries. Describe management procedures by means of 9 representative case reports. Data statistics: sex; age; race; cause of injury; type of pelvic fracture; type of associated injury; result; average length of hospital stay.

16-4119 S

FATAL TRAFFIC ACCIDENTS IN BRISBANE FROM 1935 TO 1964. See 21-4119 S

16-4149 S

Levine, J. I./ Crampton, R. S.
MAJOR ABDOMINAL INJURIES ASSOCIATED WITH PELVIC FRACTURES
Meadowbrook Hospital, Dept. of Surgery, Hempstead, New York. Feb. 1963. 3 p. tables. ref.
Surgery, Gynecology and Obstetrics, Vol. 116, Feb. 1963, pp. 223-226.

JNP Consequences/Complications, Injury/Trauma, Accident
JNH Fractures
OADH Pelvis, Lower Extremity, Anatomy/Body, Biomedical Aspect
VN Epidemiology/Etiology, Disciplines
YEF Data Statistics, Contents, Study-Report Type

Authors review 35 cases. Correlate the type of fracture and type of abdominal injury. Describe and discuss major complications. Data statistics: associated injuries; type of fracture and type of accident.

16-4337 S

ROAD ACCIDENTS. See 03-4337 S

17-2592 S

TRAFFIC INJURY IN BRISBANE. Report of a general survey. See 01-2592 S

17-3703 S

DIE KLINISCHE DEDEUTUNG DER TRAUMATISCHEN FETTEMBOLE. [THE CLINICAL SIGNIFICANCE OF TRAUMATIC FAT EMBOLISM.] See 25-3703 S

17-3705 S

AN ANALYSIS OF 950 FATAL INJURIES. See 25-3705 S

17-3707 S

Lena, A./ d'Allaines, C.
COMPLICATIONS ARTERIELLES DES TRAUMATISMES FERMES DES MEMBRES. Premier rapport. [ARTERIAL COMPLICATIONS OF CLOSED INJURIES TO LIMBS. First report.]
1963. 16 p. tables.
Journal de Chirurgie (Paris), Vol. 86, 1963, pp. 197-212.

BIBLIOGRAPHY

JNE Contusion/Crushing, Injury/Trauma, Accident
 OAKCB Arteries, Blood Vessels, Cardiovascular System,
 Anatomy/Body, Biomedical Aspect
 OAD Lower Extremity
 OAG Upper Extremity
 YEF Data Statistics, Contents, Study-Report Type
 WSDG Amputation, Surgery, Medical, Methods
 L Time

Authors give state-of-the-art report associated with their findings. Discuss types of arterial injuries, with tables of amputation frequencies according to artery injured and interval between accident and surgery; evaluate diagnostic techniques, especially arteriography, and surgical and other therapies.

17-3708 S

Patman, R. D./ Poulos, E./ Sires, G. T.
**THE MANAGEMENT OF CIVILIAN ARTERIAL IN-
 JURIES.**

Texas Univ., Southwestern Medical School, Dept. of
 Surgery, Dallas. April 1964. 8 p. ref. figs. tables.
Surgery, Gynecology, and Obstetrics, Vol. 118, No. 4,
 April 1964, pp. 725-738.

WSD Surgery, Medical, Methods
 OAKC Blood Vessels, Cardiovascular System,
 Anatomy/Body, Biomedical Aspect
 YEF Data Statistics, Contents, Study-Report Type
 JNP Consequences, Injury/Trauma, Accident
 JNK Hemorrhage

Analyze 271 arterial injuries in 256 patients seen over twelve years, tabulating locations and types of wounds. 48% in shock upon arrival at hospital. Mortality rate of 8.2%, and true amputation rate of 3.8%. Average blood replacement was 930 c.c. and average replacement with physiologic salt solution was 2,095 c.c. Detailed description of types of arterial injury in which lateral repair, replacement grafts, and end-to-end anastomosis is best repair technique. Only 18.6% of injuries to extremities were treated by ligation as definitive measure. Ancillary procedures are emphasized, including relief of associated vasospasm and indications for fasciotomy.

17-3721 S

**FAT EMBOLISM IN FATAL AUTOMOBILE ACCI-
 DENTS.** See 25-3721 S

17-3722 S

**FAT EMBOLISM STUDIED IN 100 PATIENTS DYING
 AFTER INJURY.** See 25-3722 S

17-3724 S

**MORTALITY RELATED TO VARIOUS METHODS OF
 TREATMENT OF FEMORAL SHAFT FRACTURES.**
 See 25-3724 S

17-3728 S

**AUTOPSY FINDINGS IN 127 PATIENTS FOLLOWING
 FATAL TRAFFIC ACCIDENTS.** See 22-3728 S

17-3780 N

Grogono, B. J. S.
SOME COMPLICATIONS OF UPPER LIMB INJURIES.

May 1966. 5 p. photos. figs. tables. ref.
Manitoba Medical Review, Vol. 46, May 1966, pp.
 324-333.

OAG Upper Extremity, Anatomy/Body, Biomedical
 Aspect
 JNP Consequences, Injury/Trauma, Accident
 WSE Therapeutic, Medical, Methods
 OAKC Blood Vessels, Cardiovascular System
 JNH Fracture

Vascular trauma, myositis ossificans, and fractures of the humeral shaft complicate upper-limb injuries. Value of vascular surgery is reflected in table demonstrating reduction in amputation rates from World War I to the Korean War. Discusses signs and symptoms for vascular complications, Volkman's ischemic contracture (with case reports), and recovery after arterial occlusion, as well as capsular calcification and pararticular ossification (with X rays).

17-3786 S

**THE EFFECT OF SUBLINGUAL POTASSIUM
 HEPARIN (CLARIN) ON THE SERUM LIPASE
 ACTIVITY OF PATIENTS FOLLOWING FRACTURES.**
 See 25-3786 S

17-3788 S

Hinchey, J. J./ Day, P. L.
**PRIMARY PROTHETIC REPLACEMENT IN FRESH
 FEMORAL-NECK FRACTURES.**
 March 1964. 10 p. tables. figs. ref.
Journal of Bone and Joint Surgery, Vol. 46-A, No. 2,
 March 1964, pp. 223-240.
 Conference: American Orthopaedic Association, annual,
 29 May 1962, Castle Harbour, Bermuda.

YEF Data Statistics, Contents, Study-Report Type
 JNH Fracture, Injury/Trauma, Accident
 OADEB Femur, Leg, Lower Extremity, Anatomy/Body,
 Biomedical Aspect
 WSE Therapeutic, Medical, Methods
 WSD Surgery
 EEC Old Aged, Adults, People
 JNP Consequences

Two doctors report on 294 Moore Vitallium prosthetic replacements of the femoral head which they performed, 1953-1960, on 288 patients, mostly elderly. List indications for use of prosthesis, management, general and local complications, and short-term evaluation of results. Illustrations of roentgenograms show bone formations about prosthesis.

17-3789 S

**CENTRAL ACETABULAR FRACTURES: A review of
 thirty-five cases.** See 16-3789 S

17-3835 N

**AGRICULTURAL TRACTOR ACCIDENTS: A descrip-
 tion of 14 tractor accidents and a comparison with road
 traffic accidents.** See 18-3835 N

17-3847 S

Goldman, B. S./ Firor, W. B./ Key, J. A.
THE RECOGNITION AND MANAGEMENT OF PERIPHERAL ARTERIAL INJURIES.

Toronto General Hospital, Div. of Cardiovascular Surgery (Canada)/ Ontario Heart Foundation (Canada)/ Toronto Univ., Dept. of Surgery (Canada). 1965. 7 p. tables. figs. *Canadian Medical Association Journal*, Vol. 92, 29 May 1965, pp. 1154-1160.

WSC Diagnosis, Medical, Methods
WSE Therapeutic
WSD Surgery
OAKCB Arteries, Blood Vessels, Cardiovascular System, Anatomy/Body, Biomedical Aspect
L Time
WSDG Amputation
YCK Case Studies, Nature of Study, Study-Report Type
YEF Data Statistics, Contents

In 61 cases (1953-1964), 50% of the injuries were not immediately recognized. Locations of injuries and classification of arterial lesions are given. Early- and late-management results are given for each type of repair. Case reports and a few unsatisfactory results are discussed.

17-3863 N

Fraser, G. A.
CLOSED TRAUMATIC RUPTURE OF COMMON FEMORAL ARTERY.

Poole General Hospital, Dept. of Surgery, Dorset (England). April 1965. 4 p. illus. ref. *Annals of Surgery*, Vol. 161, No. 4, April 1965, pp. 539-544.

JNE Contusion/Crushing, Injury/Trauma, Accident
OAKCB Arteries, Blood Vessels, Cardiovascular System, Anatomy/Body, Biomedical Aspect
OADG Thigh, Lower Extremity
YCK Case Studies, Nature of Study, Study-Report Type
WSD Surgery, Medical, Methods
YCC State-of-the-Art, Nature of Study

Contains brief state-of-the-art discussion for acute arterial injury. Two cases of acute injury of common femoral artery due to blunt trauma are reported, one with successful end-to-end anastomosis, and another who underwent two unsuccessful operations before successful freeze-dried homograft 21 months after accident.

17-3901 N

Miller, D. S./ Gilbert, R. L.
MANAGEMENT OF FRACTURE WITH VASCULAR INJURY.

Chicago Medical School, Dept. of Orthopedic Surgery, Illinois/ Air Force, Scott Air Force Base, Belleville, Illinois. Sept. 1964. 6 p. ref. *Geriatrics*, Vol. 19, Sept. 1964, pp. 658-668.

JNH Fracture, Injury/Trauma, Accident
WSE Therapeutic, Medical, Methods
OAKC Blood Vessels, Cardiovascular System, Anatomy/Body, Biomedical Aspect
WSC Diagnosis
OAD Lower Extremity
YCK Case Studies, Nature of Study, Study-Report Type

Cases are reported of four patients in their seventies. Complications, differential diagnosis, injuries to lower limbs, and frequent associated arterial injuries are discussed.

17-3917 S

Kulowski, Jr.
FRACTURES OF THE SHAFT OF THE FEMUR RESULTING FROM AUTOMOBILE ACCIDENTS.

Oct. 1964. 5 p. tables. figs. ref. *International College of Surgeons Journal*, Vol. 42, Oct. 1964, pp. 412-420.

JNH Fracture, Injury/Trauma, Accident
OADEB Femur, Leg, Lower Extremity, Anatomy/Body, Biomedical Aspect
VN Epidemiology, Disciplines
EA Age, People
EF Sex
YEF Data Statistics, Contents, Study-Report Type

Etiology, types and speeds of impact, risk of injury according to seat occupied, femoral-shaft morbidity, and age and sex are given for 50 patients (1947-1962). Seat belt is mentioned as effective restraining device.

17-3921 S

Dencker, H.
SHAFT FRACTURES OF THE FEMUR: A comparative study of the results of various methods of treatment in 1,003 cases.

Göteborg Univ., Dept. of Surgery (Sweden). 1965. 7 p. tables. ref. *Acta Chirurgica Scandinavica*, Vol. 130, 1965, pp. 173-184.

JNH Fracture, Injury/Trauma, Accident
OADEB Femur, Leg, Lower Extremity, Anatomy/Body, Biomedical Aspect
EA Age, People
WSE Therapeutic, Medical, Methods
YEF Data Statistics, Contents, Study-Report Type
JNP Consequences

Deals with 992 patients in Sweden, 1952-1954, 94 percent between 17 and 39 years of age, with follow-up investigation 4-8 years after accident. Tabulates frequency of fracture types according to closed and open fractures, and methods of treatment. Discusses complications. Recommends traction with wire through the tibial tuberosity as standard treatment for both closed and open fractures of the femur.

17-3930 S

Lucas, G. L./ Wirka, H. W.
ORTHOPEDIC PROBLEMS IN AGRICULTURAL TRAUMA.

Wisconsin Univ. Hospital, Dept. of Surgery, Div. of Orthopedics, Madison, Dec. 1965. 5 p. table. ref. *Wisconsin Medical Journal*, Vol. 64, Dec. 1965, pp. 471-475.

JNH Fracture, Injury/Trauma, Accident
YER General Discussion, Contents, Study-Report Type
VN Epidemiology, Disciplines
JNP Consequences

EA Age, People
WSE Therapeutic, Medical, Methods

Of 100,000 accidental deaths per year in the U.S., 4,500 are among farmers. For every fatality, there are approximately 100 seriously disabling accidents. Authors review 19 cases, ages 17-66, giving etiology, injury, and complicating factors. Agricultural trauma frequently produces serious musculoskeletal injury requiring orthopedic surgery.

17-3937 S

Støren, G.

CONSERVATIVE TREATMENT OF ANKLE FRACTURES: Follow up of 99 fractures treated conservatively. Lillehammer Fylkessykehus, Dept. of Surgery (Norway). 1964. 4 p. tables. ref.
Acta Chirurgica Scandinavica, Vol. 128, 1964, pp. 45-50.

JNH Fracture, Injury/Trauma, Accident
OADA Ankle, Lower Extremity, Anatomy/Body, Biomedical Aspect
OADED Tibia, Leg
WSE Therapeutic, Medical, Methods
YEF Data Statistics, Contents, Study-Report Type

Study comprises 99 severe cases during 1945-1958, followed up after mean interval of eight years. Table correlates position on admission and result of reduction. Results compare favorably with those of previous studies on conservative treatments and operative methods.

17-3944 S

Hjelmstedt, A./ Sundstrom, R.

DEEP VENOUS THROMBOSIS FOLLOWING FRACTURES OF THE TIBIAL SHAFT: A phlebographic study of 40 patients one to two weeks after injury and after fracture union. 1963. 6 p. tables. ref. figs.
Acta Chirurgica Scandinavica, Vol. 126, 1963, pp. 211-220.

OADED Tibia, Leg, Lower Extremity, Anatomy/Body, Biomedical Aspect
OAKCC Veins, Blood Vessels, Cardiovascular System
JNH Fracture, Injury/Trauma, Accident
VN Epidemiology/Etiology, Disciplines
YEF Data Statistics, Contents, Study-Report Type
JNPO Occlusion, Thrombosis, Clot

Tables show incidence of thrombosis by age and sex, in relation to fracture and trauma of reduction, following open and closed reduction, and with different fracture types and age groups. In one case in which the patient succumbed to pulmonary embolism, thrombosis was studied at autopsy. Literature review covers findings on thrombosis of other researchers. Anticoagulant therapy is discussed.

17-3946 S

FAT EMBOLISM: Fat absorption from the site of injury. See 25-3946 S

17-3965 S

Kapandji, A./ Alexandre, J.-H./ Frain, Ph./ Boury, G.
ÉTUDE STATISTIQUE GLOBALE DE 216 CAS DE

FRACTURE DU COL DUX FÉMUR. [OVER-ALL STATISTICAL STUDY OF 216 CASES OF FEMORAL NECK FRACTURE.]

Hôpital Broussais, Paris (France). Dec. 1965. 8 p. figs. ref.
Annales de Chirurgie, Vol. 19, Dec. 1965, pp. 1616-1623.

JNH Fracture, Injury/Trauma, Accident
YEF Data Statistics, Contents, Study-Report Type
OADEB Femur, Leg, Lower Extremity, Anatomy/Body, Biomedical Aspect
WSE Therapeutic, Medical, Methods
JNP Consequences/Complications
WSD Surgery

Data include etiology, length of stay in hospital, type of fracture by age, surgical vs. conservative treatment, types of nailing, results and complications. High incidence of aged patients. Mortality rates are compared for different kinds of therapy.

17-4013 N

Anlyan, W. G./ Goldner, J. L./ Clippinger, F. W.
THROMBOEMBOLIC COMPLICATIONS OF ORTHOPEDICS AND THE SURGERY OF TRAUMA. Duke Univ. School of Medicine, Dept. of Surgery, Div. of Orthopaedic Surgery, Durham, North Carolina. Feb. 1962. 4 p. ref.
North Carolina Medical Journal, Vol. 23, No. 2, Feb. 1962, pp. 45-50.

WSD Surgery, Medical, Methods
JNP Consequences/Complications, Injury/Trauma, Accident
JNPO Occlusion/Thrombosis/Clot
JNH Fracture
YCK Case Studies, Nature of Study

Authors review a 12-year experience. Discuss incidence, diagnosis, treatment and prevention. Ten illustrative case reports.

17-4027 S

Gibson, J. M. C.
MULTIPLE INJURIES: The management of the patient with a fractured femur and a head injury. Radcliffe Infirmary, Oxford (England). Aug. 1960. 4 p. ref.
Journal of Bone and Joint Surgery, Vol. 42B, No. 3, Aug. 1960, pp. 425-431.

JNH Fracture, Injury/Trauma, Accident
JNX Multiple Severe Injuries
OADEB Femur, Leg, Lower Extremity, Anatomy/Body, Biomedical Aspect
OAI Head
WSE Therapeutic, Medical, Methods

Clinical study of 59 cases, 56 the result of road accidents. Author describes problems, immediate assessment and treatment, definitive treatment of fractured femur, and results. Five illustrative case reports.

17-4037 S

Boury, G./ Plummerault, J./ Alexandre, J. H.
ÉTUDE ANALYTIQUE DE 122 FRACTURES DIA-PHYSAIRES DE JAMBE CHEZ L'ADULTE. [ANALYTI-

CAL STUDY OF 122 DIAPHYSIAL LEG FRACTURES IN ADULTS.]

1965. 8 p. figs. ref.

Annales de Chirurgie, Vol. 19, 1965, pp. 1624-1631.

- JNH Fracture, Injury/Trauma, Accident
OADE Leg, Lower Extremity, Anatomy/Body, Biomedical Aspect
JNP Consequences/Complications
NKFP Period, Frequency/Time, Operating Conditions, Physical Aspect

Authors give frequency of cases by sex and age; tabular correlation of site of fracture (upper third, middle, lower third of leg) with type of fracture (transverse, oblique, spiroid, multiple). Discuss therapy: orthopedic (conservative) treatment, and osteosynthesis (bolting, nailing, plates, etc.). All categories are discussed giving time for recovery, and results.

17-4071 S

Neely, W. A./ Hardy, J. D./ Artz, C. P.

ARTERIAL INJURIES IN CIVILIAN PRACTICE: A current reappraisal with analysis of forty-three cases.

Mississippi Univ., Medical Center, Dept. of Surgery, Jackson. July 1961. 8 p. ref. fig.

Journal of Trauma, Vol. 1, July 1961, pp. 424-439.

Grant No: RG 7181.

Sponsor: Mississippi Heart Association/ National Institutes of Health.

Conference: American Association for the Surgery of Trauma, 20th annual, 5-7 Oct. 1960, Coronado, California.

- JNG Laceration/Openwound/Penetrating, Injury/Trauma, Accident
OAKCB Arteries, Blood Vessels, Cardiovascular System, Anatomy/Body, Biomedical Aspect
WSE Therapeutic, Medical, Methods
WSD Surgery
YEF Data Statistics, Contents, Study-Report Type
YCK Case Studies, Nature of Study

Series reflects changes in management of arterial injuries over five years with current emphasis on early direct repair. Cases are classified according to complete division, incomplete division, puncture wounds, contusions, and arteriospasm and kinking. Cites injury, interval before evaluation, pathology, operative procedure, and result for each case.

17-4104 S

THE MANAGEMENT OF SKELETAL FRACTURES IN THE PATIENT WITH A HEAD INJURY. See 11-4104 S

17-4197 S

Hughes, C. W.

ARTERIAL REPAIR DURING THE KOREAN WAR.

Walter Reed Army Medical Center, Div. of Surgery, Washington, D.C. April 1958. 4 p. tables. ref.

Annals of Surgery, Vol. 147, No. 4, April 1958, pp. 555-561.

- OAKCB Arteries, Blood Vessels, Cardiovascular System, Anatomy/Body, Biomedical Aspect
WSD Surgery, Medical, Methods
YEF Data Statistics, Contents, Study-Report Type

- JNP Consequences/Complications, Injury/Trauma, Accident

Author reviews literature and his experience. Summarizes reports of 304 major vessel repairs, describes methods of treatment. Discusses accompanying vein injuries. Amputation rate of 13% after suture repair, 51% following ligation. Data statistics: artery injured; type of treatment; result of treatment.

17-4337 S

ROAD ACCIDENTS. See 03-4337 S

17-4533 S

Le Peltier, M.

17 LÉSIONS ARTÉRIELLES FÉMORO-POPLITÉES TRAITÉES PAR RECONSTRUCTION IMMÉDIATE. [17 FEMORO POPLITEAL ARTERIAL LESIONS TREATED BY IMMEDIATE RECONSTRUCTION].

June 1963. 5 p.

Societe de Medecine Militaire Francaise Bulletin Mensuel, Vol. 57, June 1963, pp. 251-258.

- JN Injury/Trauma, Accident
WSD Surgery, Medical, Methods
OAKCB Arteries, Blood Vessels, Cardiovascular System, Anatomy/Body, Biomedical Aspect

Case reports are given for 17 femoro popliteal arterial lesions treated by immediate reconstruction. Findings are summarized giving rating of results by existence of pulse, effect of delay in operating, associated injuries and causes for amputation.

17-4534 S

LA CAUSA DI MORTE NEI TRAUMATIZZATI: Studio clinico-statistico ed anatomo-patologico. [CAUSE OF DEATH IN TRAUMATIZED PATIENTS: Clinico-statistical and anatomo-pathologic study.] See 25-4534 S

18-3705 S

AN ANALYSIS OF 950 FATAL INJURIES. See 25-3705 S

18-3709 S

A FIVE-YEAR SURVEY OF 152 ACUTE ABDOMINAL INJURIES. See 15-3709 S

18-3717 S

PENETRATING CARDIAC INJURIES. See 14-3717 S

18-3723 S

CLOSED THORACIC INJURIES. See 13-3723 S

18-3728 S

AUTOPSY FINDINGS IN 127 PATIENTS FOLLOWING FATAL TRAFFIC ACCIDENTS. See 22-3728 S

18-3784 N

THE MANAGEMENT OF HEAD INJURIES COMPLICATED BY MAJOR EXTRACRANIAL TRAUMA. See 11-3784 N

BIBLIOGRAPHY

18-3785 S
PENAL TRAUMA: Experience with 258 cases. See 15-3785 S

18-3790 S
COMPLICATIONS ASSOCIATED WITH FRACTURES OF THE PELVIS. See 16-3790 S

18-3798 S
THORACIC TRAUMA: Analysis of 1022 cases. See 13-3798 S

18-3801 S
INJURIES OF THE LIVER IN 300 CONSECUTIVE PATIENTS. See 15-3801 S

18-3802 S
Solheim, K.
PEDESTRIAN DEATHS IN OSLO TRAFFIC ACCIDENTS.
11 Jan. 1964. 3 p. tables. ref.
British Medical Journal, Vol. 1, 11 Jan. 1964, pp. 81-83.

EM	Pedestrians, People
JNB	Fatal, Injury/Trauma, Accident
L	Time
JNX	Multiple Severe Injuries
EA	Age
EF	Sex
VN	Epidemiology, Disciplines
WSI	Autopsy, Medical, Method
YEF	Data Statistics, Contents, Study-Report Type
JNPJ	Aspiration/Dehydration, Consequences
WSB	First Aid

A 10-year series of 168 pedestrians fatally injured in traffic accidents in Oslo is discussed. These account for 65% of traffic fatalities during same period. Distribution by age and sex, survival period, frequency of injury according to body areas and mortality, and effect of multiple injuries on survival period are tabulated. Intoxication among fatally-injured pedestrians is discussed.

18-3828 S
TRAUMATIC RUPTURE OF AORTA. Special reference to automobile accidents. See 14-3828 S

18-3835 N
Rees, W. D.
AGRICULTURAL TRACTOR ACCIDENTS: A description of 14 tractor accidents and a comparison with road traffic accidents.
10 July 1965. 4 p. tables. ref.
British Medical Journal, Vol. 2, 10 July 1965, pp. 63-66.

JNB	Fatal, Injury/Trauma, Accident
KBK	Rural, Terrain/Habitat, Space
YCK	Case Studies, Nature of Study, Study-Report Type
VN	Epidemiology, Disciplines
OADH	Pelvis, Lower Extremity, Anatomy/Body, Biomedical Aspect
JNE	Contusion/Crushing

14 case reports are given. Tractor accidents are shown to have much higher mortality and serious-injury rates than road-traffic accidents, with 25% mortality in injury with overturned tractor. Injuries are of crush type most frequently to trunk. Typical tractor-accident victim is described. Safety frames are recommended.

18-3846 S
GUNSHOT WOUNDS OF THE HEART: A review. See 14-3846 S

18-3891 S
SURGICAL EXPERIENCE WITH 103 TRUNCAL SHOT-GUN WOUNDS. See 15-3891 S

18-3908 S
INJURY OF THE SUPERIOR MESENTERIC VESSELS SECONDARY TO NONPENETRATING ABDOMINAL TRAUMA. See 15-3908 S

18-3912 S
TREATMENT OF PENETRATING WOUNDS OF THE CHEST. See 13-3912 S

18-3931 N
THE INCIDENCE AND MECHANISMS OF SHOCK IN HEAD INJURY. See 22-3931 N

18-3967 S
BESONDERHEITEN BEIM STUMPFEN BAUCH-TRAUMA. [SPECIAL FEATURES OF BLUNT ABDOMINAL TRAUMA.] See 15-3967 S

18-4002 S
THE COMATOSE INJURED PATIENT. See 11-4002 S

18-4003 N
McFarland, R. A.
RESEARCH ON ACCIDENTAL TRAUMA IN THE ARMED SERVICES: A summary of the research program of the Commission on Accidental Trauma.
Armed Forces Epidemiological Board, Commission on Accidental Trauma, Washington, D.C./ Harvard School of Public Health, Cambridge, Massachusetts. Aug. 1962. 8 p. graphs. tables. ref.
Military Medicine, Vol. 127, No. 8, Aug. 1962, pp. 615-629.

YCB	Research, Nature of Study, Study-Report Type
VN	Epidemiology/Etiology, Disciplines
JN	Injury/Trauma, Accident

Nonbattle injuries were found to present a serious problem to the Armed Services. "Private motor vehicles result in more fatalities than any other single cause." Author describes the research sponsored in the last ten years by the Commission. Projects were of the following types: epidemiological studies and surveys; studies relating to host factors (personal characteristics of drivers involved in accidents); studies relating to host-agent interrelationships; studies relating to host-agent-environ-

ment interrelationships; countermeasure research. Describes two countermeasures which substantially reduced the accident rate, and some other practical application of research results.

18-4007 S

Garrett, J. W./ Braunstein, P. W.
THE SEAT BELT SYNDROME.
May 1962. 10 p. photos. tables. ref.
Journal of Trauma, Vol. 2, No. 3, May 1962, pp. 220-238.
Conference: American Association for the Surgery of Trauma, 21st annual, 28-30 Sept. 1961, Chicago, Illinois.

WSC Diagnosis, Medical, Methods
DMDB Seat Belts, Restraint Systems, Auxiliaries/Accessories, Vehicle
YCK Case Studies, Nature of Study, Study-Report Type

Authors studied 2,778 accident-involved automobiles in which at least one occupant was wearing a seat belt. Concluded that seat belts did not significantly increase the frequency or severity of injuries. Found less than 1% of instances of belt failure among 3,325 users. Data statistics: accident type and injuries (with and without belts); highest impact speed; lower torso injuries; type of belt failure.

18-4009 S

Gissane, W./ Bull, J.
INJURIES FROM ROAD ACCIDENTS.
Birmingham Accident Hospital, Road Injuries Research Group (England). April 1962. 5 p. tables. illus. ref.
The Practitioner, Vol. 188, April 1962, pp. 489-497.

JN Injury/Trauma, Accident
VN Epidemiology/Etiology, Disciplines
EA Age, People
EF Sex

Details of 350 fatalities. Authors note the severity and multiplicity of these injuries and the high incidence of brain injuries. Discuss the need and some possible mechanisms for prompt and efficient treatment. Describe modifications of vehicle design which might reduce frequency and severity of some types of accidents. Data statistics: mode of transportation, types of injuries and complications; age; sex; survival time.

18-4022 S

CIVILIAN PENETRATING WOUNDS OF THE ABDOMEN. I. Factors in mortality and differences from military wounds in 494 cases. See 15-4022 S

18-4028 S

SURGICAL CONSIDERATIONS OF NON-PENETRATING ABDOMINAL INJURIES. See 15-4028 S

18-4044 S

LE LESIONI DELLA MILZA NEI TRAUMI CHIUSI ED APERTI DELL'ADDOME: Considerazioni su 91 casi. [LESIONS OF THE SPLEEN IN CLOSED AND OPEN TRAUMAS OF THE ABDOMEN: Considerations on 91 cases.] See 15-4044 S

18-4047 S

CLOSED ABDOMINAL INJURIES: An analysis of 168 consecutive cases with particular reference to diagnostic problems. See 15-4047 S

18-4051 S

LESIONS ASSOCIATED WITH CLOSED LIVER INJURY: A clinical study of 192 fatal cases. See 15-4051 S

18-4058 N

Ponka, J. L./ Antoni, R. O.
EMERGENCY MANAGEMENT OF THORACO-ABDOMINAL TRAUMA: A study of 275 injury patients. June 1961. 5 p. table. figs.
Henry Ford Hospital Medical Bulletin, Vol. 9, June 1961, pp. 263-270.

JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
JNG Laceration/Openwound/Penetrating
OAE Abdomen, Anatomy/Body, Biomedical Aspect
OAF Thorax
WSE Surgery, Medical, Methods

General findings from 275 cases of thoraco-abdominal trauma between 1953 and 1956 are discussed. Possibility of involvement of multiple organs with both penetrating and nonpenetrating injuries is emphasized. Establishment of adequate airway and maintenance of circulation is first consideration and must be assured before X rays are taken. Essentials for management of chest and upper abdominal injuries are presented, and teamwork by members of different surgical specialties is emphasized.

18-4061 S

Kunz, H./ Domanig, E., Jr./ Howanietz, L.
DIE URSACHEN POSTOPERATIVER TODESFÄLLE. [THE CAUSES OF POST OPERATIVE DEATHS.]
Wien Universitat, Chirurgischen Klinik (Austria). 1962. 11 p. tables. graphs. ref.
Langenbecks Archiv fuer Klinische Chirurgie, Vol. 299, 1962, pp. 441-460.

JNB Fatal, Injury/Trauma, Accident
JNP Consequences/Complications
WSD Surgery, Medical, Methods
WSC Diagnosis
VN Epidemiology/Etiology, Disciplines
WSI Autopsy/Pathology

2,596 cases of post-operative death are discussed. In the period 1957-1960, of 557 cases there were 101 in which surgical procedure was needed to treat severe injuries. Trends of the frequencies of various causes of death are shown and discussed. 215 cases were caused by pulmonary embolism.

18-4064 S

PELVIC FRACTURES: Associated intestinal and mesenteric lesions. See 16-4064 S

18-4072 S

ANALYSIS OF FACTORS AFFECTING SURVIVAL AFTER CHEST INJURIES. See 13-4072 S

BIBLIOGRAPHY

- 18-4073 S
PENETRATING RENAL INJURIES: An analysis of 100 cases. See 15-4073 S
- 18-4081 S
A PROPOS DE 268 TRAUMATISMES THORACIQUES FERMES. [APROPOS OF 268 CLOSED CHEST INJURIES. See 13-4081 S
- 18-4084 S
THE SURGICAL MANAGEMENT OF 640 CONSECUTIVE LIVER INJURIES IN CIVILIAN PRACTICE. See 15-4084 S
- 18-4085 S
COMPLICATED PELVIC FRACTURES (WITH CASE REPORTS). See 16-4085 S
- 18-4092 S
CONSIDERAZIONI STATISTICHE E DI TERAPIA SU 517 TRAUMATIZZATI CRANIO-ENCEFALICI. [STATISTICAL AND THERAPEUTIC CONSIDERATIONS ON 517 PATIENTS WITH CRANIOCEREBRAL INJURIES.] See 11-4092 S
- 18-4106 S
UNRECOGNIZED ABDOMINAL TRAUMA IN PATIENTS WITH HEAD INJURIES. See 15-4106 S
- 18-4108 S
ASSOCIATED INJURIES IN HEAD INJURED PATIENTS. See 11-4108 S
- 18-4126 S
INJURIES OF THE LIVER: A review of 111 cases. See 15-4126 S
- 18-4133 S
Izant, R. J., Jr./ Hubay, C. A.
THE ANNUAL INJURY OF 15,000,000 CHILDREN: A limited study of childhood accidental injury and death. Western Reserve Univ., School of Medicine, Div. of Pediatric Surgery, Cleveland, Ohio/ Univ. Hospitals, Cleveland, Ohio. 1966. 6 p. ref. tables. charts. *Journal of Trauma*, Vol. 6, No. 1, 1966, pp. 65-74. Conference: American Association for the Surgery of Trauma, 25th annual, 14-16 Oct. 1965, Philadelphia, Pennsylvania.
- JN Injury/Trauma, Accident
EC Children, People
JNB Fatal
VN Epidemiology/Etiology, Disciplines
YEF Data Statistics, Contents, Study-Report Type
- From 5,646 child accidents treated in an emergency ward, authors project data to estimate national rate of 15,000,000/year. Discuss prevention. Data statistics: number of children treated and total number of patients; age distribution of patients; type of injury; mechanisms of injury (detailed with respect to motor vehicles); hospital admissions and service.
- 18-4149 S
MAJOR ABDOMINAL INJURIES ASSOCIATED WITH PELVIC FRACTURES. See 16-4149 S
- 18-4160 S
PENETRATING INJURIES TO THE CHEST: Clinical results in the management of 769 patients. See 13-4160 S
- 18-4172 N
Brunius, U./ Lindgren, S.
SAKERHETSBALTETS SKYDDSEFFEKT: En analys av 210 bältes-fall. [PROTECTION OFFERED BY SAFETY BELTS: An analysis of 210 safety-belt cases.] 1961. 4 p. table. ref. *Nordisk Medicin*, Vol. 66, 2 Nov. 1961, pp. 1500-1503. Order No: ST 6332 (English translation).
- JN Injury/Trauma, Accident
DMDB Seat Belts, Restraint Systems, Auxiliaries/Accessories, Vehicle
DMDC Shoulder Harnesses
- Study done in Sweden. Authors found no injuries produced or aggravated by use of safety belts. Conclude that maximum protection is offered in front-end collisions and turnover accidents; belt proved useful in 6 out of 10 cases. Data statistics: protective effect of belt; type of collision; speed of vehicle. 8 case histories.
- 18-4337 S
ROAD ACCIDENTS. See 03-4337 S
- 18-4500 S
FACTORS IN THE MORTALITY OF CLOSED HEAD INJURIES. See 22-4500 S
- 18-4518 S
THORACIC INJURIES DUE TO BLUNT TRAUMA. See 13-4518 S
- 21-3713 S
EINE ANALYSE VON 827 UNFALLTODESFÄLLEN. [AN ANALYSIS OF 827 CASES OF FATAL ACCIDENTS.] See 24-3713 S
- 21-3723 S
CLOSED THORACIC INJURIES. See 13-3723 S
- 21-3748 S
MÖGLICHKEITEN UND GRENZEN ÄRZTLICHER HILFELEISTUNGEN AM UNFALLORT. [POSSIBILITIES AND LIMITATIONS OF MEDICAL ASSISTANCE AT THE SCENE OF A DISASTER.] See 02-3748 S
- 21-3757 N
Testart, J.
LA MORT PAR EMBOLIE PULMONAIRE (II). [DEATH FROM PULMONARY EMBOLISM (II).] 8 May 1965. 5 p. biblio. *La Presse Medicale*, Vol. 73, 8 May 1965, pp. 1355-1360.

BIBLIOGRAPHY

JN Injury/Trauma, Accident
OALE Lungs, Respiratory System, Anatomy/Body, Biomedical Aspect
JNPI Fat Embolism, Consequences
YCC State-of-the-Art, Nature of Study, Study-Report Type
YEC Bibliography, Contents

General state-of-the-art report: (a) reflex vasospasm, (b) pulmonary arterial hypertension, (c) pulmonary arterial obstruction: infarction, (d) pharmacology—experiments with various drugs, (e) analogy with the action of certain hormones. Concludes that embolism normally occurs as a mechanical blocking of the arterioles.

21-3758 S

Sprüth, G./ Laur, A.
ELEKTROKARDIOGRAPHISCHE FRÜHBEOBACHTUNGEN BEI LUNGENEMBOLIE. [EARLY ELECTROCARDIOGRAPHIC OBSERVATIONS IN PULMONARY EMBOLISM.]
Feb. 1964. 6 p. tables. figs. ref.
Zeitschrift für Kreislaufforschung, Vol. 53, Feb. 1964, pp. 153-163.

OAKB Heart, Cardiovascular System, Anatomy/Body, Biomedical Aspect
JNPI Fat Embolism, Consequences, Injury/Trauma, Accident
OALE Lungs, Respiratory System
YEF Data Statistics, Contents, Study-Report Type

From 1958 through 1962, authors observed 94 cases with 104 occurrences of pulmonary embolism. Only observations within 24 hours of occurrence are discussed in this report. Clinical symptoms are classified as light, medium, or severe. A relatively high incidence of alterations on the EKG is verified within the first 24 hours. An analysis is made to demonstrate some correlation between various irregularities in the EKG and severity of embolism and also to the time of first EKG recorded. Sample EKG's are discussed. The frequency of the S₁Q₃ type of change is compared to findings of other researchers.

21-3879 S

LIVER INJURIES IN NORTHERN IRELAND. See 15-3879 S

21-3882 S

McCarroll, J. R./ Braunstein, P. W./ Weinberg, S. B./ Seremetis, M G./ Cooper, W.
THE PATHOLOGY OF PEDESTRIAN AUTOMOTIVE ACCIDENT VICTIMS.
Cornell Univ. Medical College, Dept. of Public Health/ Cornell Univ. Medical College, Dept. of Surgery/ New York City, Office of the Chief Medical Examiner. 1965. 4 p. figs.
Journal of Trauma, Vol. 5, No. 3, May 1965, pp. 421-426.
Grant No: PHS AC-00019.
Sponsor: National Institutes of Health, Div. of General Medical Sciences/ Public Health Service, Div. of Accident Prevention.

JNB Fatal, Injury/Trauma, Accident
EM Pedestrians, People

WSI Autopsy, Medical, Methods
YEF Data Statistics, Contents, Study-Report Type

200 autopsies are covered in effort to determine internal injuries and to correlate them with typical body-surface lesions. Frequency of principal injuries by body area, their mortality rates, associated injuries, and time to death are discussed for head, neck and spine injuries, lesions of abdomen, and pelvic fractures.

21-3924 N

McManus, J. F. A.
THE AUTOPSY AS RESEARCH.
Indiana Univ. School of Medicine, Dept. of Pathology, Bloomington. 6 Sept. 1965. 3 p.
American Medical Association Journal, Vol. 193, No. 10, 6 Sept. 1965, pp. 808-810.

WSI Autopsy/Pathology, Medical, Methods
YER General Discussions, Contents, Study-Report Type

Challenges lack of research in autopsy, claiming that some techniques are thirty to sixty years old, that autopsy is frequently performed by junior pathologists or medical students, and that it is understaffed, underfinanced, and generally neglected.

21-3941 S

THE STAGES OF DEVELOPMENT AND THE ORGANIZATION OF THE BIRMINGHAM ACCIDENT HOSPITAL. See 01-3941 S

21-3959 S

ZUR INITIALEN BEHANDLUNG DER FRISCHEN TRAUMATISCHEN QUERSCHNITTLÄSION. [ON THE INITIAL TREATMENT OF ACUTE TRAUMATIC SPINAL CORD INJURIES.] See 12-3959 S

21-3961 S

ERFAHRUNGEN ÜBER ERSTE ÄRZTLICHE HILFE AM UNFALLORT UND AUF DEM TRANSPORT BEI SCHWERVERLETZTEN UND LEBENSBEDROHTEN. [EXPERIENCE ABOUT MEDICAL AID AT THE SCENE OF AN ACCIDENT AND DURING TRANSPORT WITH SEVERELY INJURED PATIENT.] See 03-3961 S

21-4053 N

Massey, T. N., Jr.
PULMONARY EMBOLISM: Review of fifty autopsy cases in which pulmonary embolism was the cause or a major contributing cause of death.
Feb. 1966. 4 p. tables. ref.
North Carolina Medical Journal, Vol. 27, Feb. 1966, pp. 63-66.

OAL Respiratory System, Anatomy/Body, Biomedical Aspect
JNPO Occlusion/Thrombosis/Clot, Consequences/Complications, Injury/Trauma, Accident
WSI Autopsy, Medical, Methods
WSC Diagnosis

Authors conclude that the condition is often unrecognized and usually inadequately treated. Discuss diagnosis and management.

BIBLIOGRAPHY

21-4115 S

Gissane, W.
THE BASIC SURGERY OF MAJOR ROAD INJURIES.
Birmingham Univ. (England). May 1962. 10 p. tables.
photos. fig. ref.
London. Royal College of Surgeons of England. Annals,
Vol. 30, May 1962, pp. 281-298.
Conference: Royal College of Surgeons of England,
Robert Jones Lecture, 14 Dec. 1961.

JN Injury/Trauma, Accident
YCC State-of-the-Art, Nature of Study, Study-
Report Type
JNH Fracture
JNG Laceration/Openwound/Penetrating
NKFF Delay, Frequency/Time, Operating Conditions,
Physical Aspect
OAL Respiratory System, Anatomy/Body, Bio-
medical Aspect
JNPL Shock, Consequences/Complications
YEF Data Statistics, Contents, Study-Report Type

Author describes and discusses incidence, causes, and nature of road injuries. Presents data from 350 necropsies. Discusses injuries to the respiratory system, hemorrhagic shock, multiple injuries, head injuries and open wounds, with particular reference to diagnosis and priority of treatment. Concludes that mortality rate can be reduced by prompt treatment. Describes three-tiered scheme proposed in the Interim Report of the Accident Services Review Committee. Emphasizes the need for comprehensive accident departments. Data statistics: mode of travel; sites of severe injuries; time of death.

21-4119 S

Tonge, J. I./ O'Reilly, M. J. J./ Davison, A./ Derrick, E. H.
FATAL TRAFFIC ACCIDENTS IN BRISBANE FROM 1935 TO 1964.
Institute of Forensic Pathology, Dept. of Health, Brisbane (Australia)/ Queensland Institute of Medical Research (Australia). 21 Nov. 1964. 10 p. fig. tables. ref.
Medical Journal of Australia, Vol. II, No. 21, 21 Nov. 1964, pp. 811-821.

JNB Fatal, Injury/Trauma, Accident
JN Injury/Trauma
VN Epidemiology/Etiology, Disciplines
YEF Data Statistics, Contents, Study-Report Type
WSI Autopsy/Pathology, Medical, Methods
JKB Ejection, Accident Hazards

Authors present data on 2214 fatalities, derived from necropsies and police records, discuss implications. Data statistics: mode of transportation; year of accident; sex; actual and expected number of fatalities; number of vehicles, fatalities; deaths by time of day; distribution of abdominal injuries; distribution of injuries to neck, spine, pelvis; distribution of upper and lower limb fractures; total number of injuries; total number of victims; injuries per victim; uncomplicated extradural and subdural hemorrhage; cervical fracture; multiple fractures of lower limbs; pneumonia; fat embolism; traumatic asphyxia; blood alcohol levels; burning and drowning; ejection. When large numbers are involved, data are tabulated by mode of transportation and/or period in which accident occurred.

21-4134 S

Schubert, G. E./ Koeberle, H.
THE INCIDENCE OF MORBID-ANATOMICAL EVI-

DENCE OF SHOCK-KIDNEY AND OTHER RENAL DISORDERS IN UNSELECTED AUTOPSY MATERIAL.
Tubingen Univ., Institute of Pathology (Germany). May 1966. 8 p. figs. tables. ref.
German Medical Monthly, Vol. 11, May 1966, pp. 192-199.
Sponsor: German Research Association, Bonn.

WSI Autopsy/Pathology, Medical, Methods
YEF Data Statistics, Contents, Study-Report Type
OAMB Kidneys, Urogenital System, Anatomy/Body, Biomedical Aspect
JNPL Shock, Consequences/Complications, Injury/Trauma, Accident

For two groups of 3,400 and 747 cases, authors describe pathological and histological criteria. Found pathological signs of acute renal failure in 4.3% and 10.2%. Clinical indications were present in 33% and 53% of the pathologically diagnosed cases. Incidence of interstitial inflammatory renal lesions was 6.9% and 6%.

21-4164 S

Knight, B.
FATAL PULMONARY EMBOLISM: Factors of forensic interest in 400 cases.
Newcastle-Upon-Tyne Univ. (England). July 1966. 3 p. charts.
Medicine, Science and the Law, Vol. 6, July 1966, pp. 150-154.

JNB Fatal, Injury/Trauma, Accident
OALE Lungs, Respiratory System, Anatomy/Body, Biomedical Aspect
JNPO Occlusion/Thrombosis/Clot, Consequences/Complications
YEF Data Statistics, Contents, Study-Report Type
VN Epidemiology/Etiology, Disciplines

In 200 coroner's cases and 200 cases drawn from hospital records, massive pulmonary embolism was the primary cause of death. Author presents and analyzes data from both groups. In 60% of cases, death occurred within 3 weeks following a fracture, significant soft tissue trauma, or a surgical operation. In about 25% of cases, death occurred without previous trauma or immobilization. Data statistics: sex; age; cause of embolism; previous trauma; seasonal variation; interval between trauma and embolism; duration of immobilization.

21-4169 S

Gorham, L. W.
A STUDY OF PULMONARY EMBOLISM: Part I. A clinicopathological investigation of 100 cases of massive embolism of the pulmonary artery; diagnosis by physical signs and differentiation from acute myocardial infarction.
New York Hospital-Cornell Medical Center, Dept. of Pathology, July 1961. 8 p. ref. tables.
Archives of Internal Medicine, Vol. 108, July 1961, pp. 8-22.

JNPO Occlusion/Thrombosis/Clot, Consequences/Complications, Injury/Trauma, Accident
OALE Lungs, Respiratory System, Anatomy/Body, Biomedical Aspect
WSI Autopsy/Pathology, Medical, Methods

NKF Frequency/Time, Operating Conditions, Physical Aspect
YEF Data Statistics, Contents, Study-Report Type

Author studied autopsy and clinical records of 100 patients. Reviews the literature. Lists and describes 12 physical signs which are pathognomic. Data statistics: clinical and pathological analysis; survival time; age; incidence of diagnostic clues; physical signs.

21-4504 S

Van Wagoner, F. H.
DIED IN HOSPITAL: A three-year study of deaths following trauma.
R. E. Thomason General Hospital, El Paso, Texas. July 1961. 5 p. tables. ref.
Journal of Trauma, Vol. 1, July 1961, pp. 401-408.
Conference: American Association for the Surgery of Trauma, 20th annual, 5-7 Oct. 1960, Coronado, California.

WSC Diagnosis, Medical, Methods
WSD Surgery
WSI Autopsy/Pathology
VN Epidemiology/Etiology, Disciplines
YEF Data Statistics, Contents, Study-Report Type
JNB Fatal, Injury/Trauma, Accident

606 male soldiers, injured in various types of accidents, who were seen alive at the hospital by a physician and died within two weeks of admission. Author analyzes data and concludes that at least 1/6 of patients would have survived with adequate diagnosis and treatment. Speed in reaching medical attention did not seem to be significant. Data statistics: age; type of trauma; clinical diagnosis; type of accident; interval between injury and admission to hospital; interval between admission and death; autopsy findings; type of treatment; adequacy of treatment.

21-4515 S

LIFE EXPECTANCY, SURVIVAL RATES, AND CAUSES OF DEATH IN CIVILIAN PATIENTS WITH SPINAL CORD TRAUMA. See 12-4515 S

21-4519 S

Deweese, M. S./ Hunter, D. C., Jr.
A VENA CAVA FILTER FOR THE PREVENTION OF PULMONARY EMBOLISM.
The Univ. of Michigan, Medical School, Dept. of Surgery, Ann Arbor. May 1963. 9 p. figs. ref. tables.
Archives of Surgery, Vol. 86, May 1963, pp. 852-868.
Conference: Western Surgical Association, 70th annual, 29 Nov.-1 Dec. 1962, St. Louis, Missouri.

WSE Therapeutic, Medical, Methods
JNPO Occlusion/Thrombosis/Clot, Consequences/Complications, Injury/Trauma, Accident
OALE Lungs, Respiratory System, Anatomy/Body, Biomedical Aspect
YEF Data Statistics, Contents, Study-Report Type

Clinical study of 24 selected patients. Authors discuss rationale for procedure and selection of patients. Describe operative technique. Discuss results. Conclude, in selected patients, procedure may be superior to ligation. List, for each patient: age; sex; primary diagnosis; date of phlebitis

onset; anticoagulant therapy; x-ray evidence; operative technique; postoperative course; clinical findings related to lower extremities. Data statistics: postoperative pulmonary emboli; patency of filter. 2 case histories.

22-3705 S

AN ANALYSIS OF 950 FATAL INJURIES. See 25-3705 S

22-3715 S

MÖGLICHKEITEN EINER INTENSIVIERUNG DER ERSTEN HILFE FÜR UNFALLVERLETZTE IN STÄDTEN MIT LANDLICHER UMGEBUNG. [POSSIBILITIES FOR INTENSIFYING FIRST AID FOR ACCIDENTS IN CITIES WITH A RURAL ENVIRONMENT.]
See 03-3715 S

22-3727 S

Gissane, W./ Bull, J.
A STUDY OF 183 ROAD DEATHS IN AND AROUND BIRMINGHAM IN 1960.
Birmingham Accident Hospital, Road Injuries Research (England). 1961. 5 p. table.
British Medical Journal, Vol. 1, 17 June 1961, pp. 1716-1720.
Sponsor: Automobile Association.

DE Motor Vehicles, Vehicle
DEB Motor Cycles
WSI Autopsy, Medical, Methods
EM Pedestrians, People
DBB Bicycles, Nonpowered
JNX Multiple Severe Injuries, Injury/Trauma, Accident
EA Age

Etiology of trauma is related to sites of severe injuries, fractures, major soft-tissue injuries, and complications. Skull fractures, brain injuries, and severe blood loss have the highest frequency. Of 97 pedestrians killed, 57 were 65 years old or over. Of 34 motorcyclists, 19 were not wearing crash-helmets, and 14 of these sustained severe brain injuries. Points out car design features responsible for some injuries. Concludes that detailed study of necropsy material would be invaluable for research into injuries of all types.

22-3728 S

Perry, J. F., Jr./ McClellan, R. J.
AUTOPSY FINDINGS IN 127 PATIENTS FOLLOWING FATAL TRAFFIC ACCIDENTS.
Ancker Hospital, Dept. of Surgery, St. Paul, Minnesota/ Ancker Hospital, Dept. of Pathology, St. Paul, Minnesota/ Minnesota Univ. School of Medicine, Minneapolis. 1964. 3 p. table.
Surgery, Gynecology and Obstetrics, Vol. 119, Sept. 1964, pp. 586-590.

WSI Autopsy, Medical, Methods
DE Motor Vehicles, Vehicle
L Time
NK Operating Conditions, Physical Aspect
OAI Head, Anatomy/Body, Biomedical Aspect
OADH Pelvis, Lower Extremity
JNH Fracture, Injury/Trauma, Accident
OAE Abdomen
YEF Data Statistics, Contents, Study-Report Type

BIBLIOGRAPHY

Describe autopsy findings on 127 traffic accident victims who were transported to hospital from 1957-1963. Victims divided into pedestrians, auto occupants, and motorcycle or bicycle riders. Criteria for classifying injuries given. Recommend hospitalizing for observation all accident victims with suspected head injuries, since this was the primary cause of death in all three groups of patients. Article suggests that if data included patients who died at scene of accident, the incidence of cardiovascular injuries would be greater. Recommend exploratory laparotomy of patients with suspected abdominal injuries.

22-3737 S

Koslowski, L./ Thies, W.
BERICHT ÜBER 5900 SCHÄDEL-HIRN-TRAUMEN.
[REPORT ON 5900 CRANIOCEREBRAL TRAUMAS.]
March 1964. 4 p. tables. ref.
Monatsschrift fuer Unfallheilkunde, Versicherungs- und Verkehrsmedizin, Vol. 67, March 1964, pp. 97-103.

JN Injury/Trauma, Accident
OAI Head, Anatomy/Body, Biomedical Aspect
OANBB Brain, Central, Nervous System
WSI Autopsy, Medical, Methods
YEF Data Statistics, Contents, Study-Report Type
JNH Fracture
WSC Diagnosis
WSE Therapeutic

In a 15 year period, the Surgical Clinic at the University of Freiburg treated 5,000 patients with head and brain trauma. Mortality has remained about the same, while the frequency of occurrence has increased. Etiology of this injury and diagnosis and therapy are discussed. Frequencies of specific injury sites and of different therapies are discussed. Associated injuries and causes of death are tabulated. Central respiratory paralysis, intracranial pressure and hemorrhage, pneumonia and fat embolism account for 88 of 106 fatalities.

22-3738 S

BESONDERE KREISLAUFREAKTIONEN IM AKUTEN STADIUM DER SCHÄDEL-HIRNSCHÄDIGUNGEN.
[SPECIAL CIRCULATORY REACTIONS IN THE ACUTE STAGE OF CRANIOCEREBRAL INJURIES.]
See 11-3738 S

22-3739 S

Frowein, R. A./ Euler, K. H./ Karimi-Nejad, A.
GENZEN DER WIEDERBELEBUNG BEI SCHWEREN HIRNTRAUMEN. [LIMITS OF RESUSCITATION IN SERIOUS BRAIN TRAUMAS.]
17 Nov. 1964. 3 p. figs. ref.
Langenbecks Archiv fuer Klinische Chirurgie, Vol. 308, 17 Nov. 1964, pp. 276-281.

JN Injury/Trauma, Accident
OANBB Brain, Central, Nervous System, Anatomy/Body, Biomedical Aspect
WSBCR Resuscitation, Maintaining Airways, First Aid, Medical, Methods
JNPM Anoxia/Hypoxia, Consequences
YEF Data Statistics, Contents, Study-Report Type

Authors measured arterial and various P₀₂ in patients who suffered trauma to the brain. Survival cases and fatalities

shown separately, and cases with and without supply of oxygen to the respiratory system, are tabulated. Fatal cases revealed in the first days after the trauma an inadequate oxygen pressure in the arterial blood supply to the brain, regardless of oxygen supplied to his respiration. Discuss limitations to resuscitative efforts in view of inadequate brain circulation caused by hypertension in brain.

22-3740 S

KOMPLIKATIONEN NACH SCHWEREM GEDECKTEM SCHÄDELHIRNTRAUMA IM KLINISCHEN UND MORPHOLOGISCHEN BEFUND. [CLINICAL AND MORPHOLOGICAL FINDINGS IN COMPLICATIONS FOLLOWING SEVERE CLOSED CEREBROCRANIAL TRAUMA.] See 02-3740 S

22-3743 S

DER SCHÄDELVERLETZTE AUS DER SICHT DES ARZTES AM UNFALLORT. [SKULL INJURIES AS SEEN BY THE PHYSICIAN AT THE SITE OF THE ACCIDENT.] See 03-3743 S

22-3744 S

DAS SCHICKSAL DES AM UNFALLORT ÄRZTLICHE VERSORGTE SCHÄDELHIRENVERLETZTEN. [THE OUTCOME OF THE CEREBROCRANIAL INJURY GIVEN MEDICAL CARE AT THE ACCIDENT SITE.] See 03-3744 S

22-3746 S

DAS AKUTE, SUBAKUTE UND CHRONISCHE SUBDURALE HEMATOM. [THE ACUTE, SUBACUTE AND CHRONIC SUBDURAL HEMATOMA.] See 11-3746 S

22-3748 S

MÖGLICHKEITEN UND GRENZEN ÄRZTLICHER HILFELEISTUNGEN AM UNFALLORT. [POSSIBILITIES AND LIMITATIONS OF MEDICAL ASSISTANCE AT THE SCENE OF A DISASTER.] See 02-3748 S

22-3754 S

ERSTE BEHANDLUNG DER VERLETZUNGSFOLGEN BEI STRASSENVERKEHRSUNFÄLLEN. [FIRST TREATMENT OF THE COMPLICATIONS OF INJURY WITH TRAFFIC ACCIDENT.] See 23-3754 S

22-3763 S

DIE BEDEUTUNG DER BLUTASPIRATION ALS TODESURSACHE BEI UNFÄLLEN. [THE SIGNIFICANCE OF ASPIRATION OF BLOOD AS CAUSE OF DEATH IN ACCIDENTS.] See 23-3763 S

22-3765 S

Broggi, G./ De Nunno, T.
RILIEVI STATISTICI IN 400 CASI DI TRAUMATIZZATI CRANICI ACUTI GRAVI. [STATISTICAL DATA ON 400 CASES OF GRAVE ACUTE CRANIAL INJURIES.]
Oct. 1963. 12 p. figs. ref.
Minerva Chirurgica, Vol. 18, Oct. 1963, pp. 891-902.

BIBLIOGRAPHY

YEF Data Statistics, Contents, Study-Report Type
OAI Head, Anatomy/Body, Biomedical Aspect
YEH Diagrams/Plans
JNE Contusion/Crushing, Injury/Trauma, Accident
JNF Concussion
JNX Multiple Severe Injuries

Selection from 100 cases of skull injury in Turin, 1958-1962. Diagrams reflect negative and positive symptoms. Each diagram shows evolution in time of patients reflecting disturbances at various levels of disintegration. Authors conclude that the conditions of commotion, contusion, and degree of coma do not allow precise evaluation of damage to nervous structures. Evolution of fatalities and surgical cases is shown separately.

22-3769 S

Voris, H. C.
FACTORS INFLUENCING MORTALITY IN HEAD INJURY.
Loyola Univ. Medical School, Chicago, Illinois/ Cook County Hospital, Chicago, Illinois. Feb. 1945. 3 p. tables. biblio.
Radiology, Vol. 44, Feb. 1945, pp. 166-170.
Conference: Radiological Society of North American, 29th annual, 1-2 Dec. 1943.

OAI Head, Anatomy/Body, Biomedical Aspect
YEF Data Statistics, Contents, Study-Report Type
OANBC Spinal Cord, Central, Nervous System
OANBB Brain
JNX Multiple Severe Injuries, Injury/Trauma, Accident
EA Age, People
WSC Diagnosis, Medical, Methods

Reports findings on 2,714 cases of head injury from 1939 to 1942, with a gross mortality rate of 11%. Location and severity of brain injury and age of patient are most important factors influencing mortality. Presence and amount of blood in cerebrospinal fluid is more important than skull fracture as prognostic sign.

22-3931 N

Clark, K.
THE INCIDENCE AND MECHANISMS OF SHOCK IN HEAD INJURY.
Texas Univ., Southwestern Medical School, Dept. of Surgery, Dallas. May 1962. 3 p. tables. ref.
Southern Medical Journal, Vol. 55, May 1962, pp. 513-517.
Sponsor: Dilworth S. Hager Fund.
Conference: Southern Medical Association, Section on Neurology and Psychiatry, 55th annual, 6-9 Nov. 1961, Dallas, Texas.

JNPL Shock, Consequences, Injury/Trauma, Accident
JNK Hemorrhage
JNPM Anoxia/Hypoxia
OAI Head, Anatomy/Body, Biomedical Aspects
JN Injury/Trauma

Studies incidence and hidden causes of shock, classifying various pathophysiological mechanisms capable of producing a shock-like state. Included are loss of vasomotor tone, hypovolemic states, and sudden failure of cardiac output. Frequency of causes for hypovolemic

shock and hypoxia and respective causes of death are tabulated. Shock in patient with head injury is said to be strongly presumptive of injury elsewhere.

22-3939 S

McLaurin, R. L./ Ford, L. E.
EXTRADURAL HEMATOMA: Statistical survey of forty-seven cases.
Cincinnati Univ., College of Medicine, Dept. of Surgery, Div. of Neurosurgery, Ohio. 1964. 4 p. tables. ref.
Journal of Neurosurgery, Vol. 21, 1964, pp. 364-371.
Conference: American Academy of Neurological Surgery, annual, 7-10 Nov. 1962, New Orleans, Louisiana.

YEF Data Statistics, Contents, Study-Report Type
JNK Hemorrhage, Injury/Trauma, Accident
OANBB Brain, Central, Nervous System, Anatomy/Body, Biomedical Aspect
OAI Head
JNH Fracture
JNF Concussion
WSE Therapeutic, Medical, Methods
WSD Surgery

Case material from eleven years in Cincinnati, showing lower morbidity in young people than in older patients. Relationship of morbidity to associated intracranial injury, lucid interval, fractures, location of hematomas, and status on arrival is shown. Comparison of intervals between injury and operative removal of extradural hematoma revealed highest morbidity in patients operated on within first six hours. Discussion of factors leading to surgical intervention and errors in management are discussed.

22-3947 S

Huang, C. T./ Cook, A. W./ Lyons, H. A.
SEVERE CRANIOCEREBRAL TRAUMA AND RESPIRATORY ABNORMALITIES. I. Physiological studies with specific reference to effect of tracheostomy on survival.
New York State Univ., Downstate Medical Center, Dept. of Medicine, Pulmonary Disease Div., Brooklyn/ New York State Univ., Downstate Medical Center, Dept. of Surgery, Div. of Neurosurgery, Brooklyn/ Kings County Hospital Center, New York. Nov. 1963. 6 p. tables. figs. ref.
Archives of Neurology, Vol. 9, Nov. 1963, pp. 545-554.
Grant No: B-1594 (C3).
Sponsor: Public Health Service.

OAIA Skull, Head, Anatomy/Body, Biomedical Aspect
OANBB Brain, Central, Nervous System
OAL Respiratory System
JNP Consequences/Complications, Injury/Trauma, Accident
JNK Hemorrhage
XTK Oxygen Supply, Medical, Equipment
WSI Autopsy/Pathology, Medical, Methods
VN Epidemiology/Etiology, Disciplines
L Time
YEF Data Statistics, Contents, Study-Report Type

Severe hyperventilation associated with respiratory alkalosis was observed in 52 of 68 patients with severe craniocerebral injuries. Tracheostomy increased survival time but did not affect mortality. Type of injury, age, survival, ratio of dead volume to tidal volume, and

BIBLIOGRAPHY

incidence of tracheostomy are tabulated. Arterial oxygen saturation is related to days of hospitalization, and relation of arterial carbon dioxide tension to survival. Postmortem examinations of 88 patients with cranio-cerebral injuries showed greater incidence of pulmonary edema, congestion, atelectasis, and bronchopneumonia in patients without tracheostomy.

22-3953 S

Freytag, E.
AUTOPSY FINDINGS IN HEAD INJURIES FROM FIREARMS.
Maryland Medico-Legal Foundation, Baltimore. Aug. 1963. 6 p. figs. tables. ref.
Archives of Pathology, Vol. 76, Aug. 1963, pp. 111-121.
Sponsor: Army Chemical Research and Development Laboratories, Biophysics Div., Maryland.

WSI Autopsy/Pathology, Medical, Methods
OAI Head, Anatomy/Body, Biomedical Aspect
JNG Laceration/Openwound/Penetrating, Injury/Trauma, Accident
YEF Data Statistics, Contents, Study-Report Type
L Time
EA Age, People
VN Epidemiology/Etiology
JNP Consequences/Complications

Statistical evaluation of 254 cases. Data statistics: age, sex, and race in relation to suicide, homicide, and accident; presence of alcohol in blood; gross pathological findings of skull and brain; survival time; incidence of operation; caliber of bullet.

22-3974 S

Frowein, R. A.
BEDEUTUNG UND BESONDERHEITEN DER ERSTEN HILFE BEI SCHWEREN SCHÄDEL-HIRNVERLETZUNGEN. [IMPORTANCE AND FEATURES OF FIRST AID IN SEVERE CRANIOCEREBRAL INJURIES.]
1964. 3 p. figs. tables.
Monatsschrift für Unfallheilkunde Versicherungs-, Versorgung, und Verkehrsmedizin, Vol. 78, 1964, pp. 190-194.

JN Injury/Trauma, Accident
OAI Head, Anatomy/Body, Biomedical Aspect
OANBB Brain, Central, Nervous System
WSB First Aid, Medical, Methods
NKFD Latency, Frequency/Time, Operating Conditions, Physical Aspect
OBM Metabolism, Problems

Charts oxygen content (arterial blood) after severe brain trauma for 118 observed cases, data ranging from one to 40 days after injury. Points out dangers of hypo- and hyper-ventilation. Oxygen pressure in venous blood in the brain found below the "indifference zone" (28-35 mm Hg) for the fatally injured, particularly in the first days after the injury, within and above the zone for the survivors. Discusses recommended first-aid measures (by physician) as a function of the state of consciousness.

22-3976 S

DER TÖDLICHE VERKEHRSunFALL AUS DER SICHT DES PATHOLOGEN. [THE FATAL TRAFFIC ACCIDENT FROM THE PATHOLOGIST'S VIEWPOINT.] See 22-3976 S

22-3978 S

DER OPERATIONSWAGEN DER CHIRURGISCHEN UNIVERSITÄTSKLINIK HEIDELBERG. [THE MOBILE OPERATION ROOM OF THE CHIRURGISCHE UNIVERSITÄTSKLINIK HEIDELBERG.] See 03-3978 S

22-3982 S

ERSTE HILFE AM UNFALLORT UNTER EINSCHLUSS DER FEHLER UN GEFAHREN. [FIRST AID AT THE ACCIDENT SITE WITH REFERENCE TO ERRORS AND DANGERS.] See 03-3982 S

22-4068 S

ENTSCHEIDENDE FAKTOREN FÜR DEN BEHANDLUNGSERFOLG BEIM EPIDURALHAMATOM. [DECISIVE FACTORS IN THE SUCCESS OF TREATMENT OF EPIDURAL HEMATOMA.] See 11-4068 S

22-4084 S

THE SURGICAL MANAGEMENT OF 640 CONSECUTIVE LIVER INJURIES IN CIVILIAN PRACTICE. See 15-4084 S

22-4090 S

ARZTLICHE VERSORGUNG SCHWERVERLETZTER AM UNFALLORT UND AUF DEM TRANSPORT. [TREATMENT BY PHYSICIAN OF THE SEVERELY INJURED, AT THE SCENE OF THE ACCIDENT AND DURING TRANSPORTATION.] See 03-4090 S

22-4098 S

Ruggiero, G./ Leighton, R. S./ Dettori, P./ Columella, F.
ACUTE CRANIAL TRAUMA: A preliminary report.
Ospedale Maggiore, Bologna (Italy). Nov. 1964. 6 p. biblio. figs.
Acta Radiologica. Diagnosis, Vol. 2, Nov. 1964, pp. 487-496.

WSC Diagnosis, Medical, Methods
OAI Head, Anatomy/Body, Biomedical Aspect
JNK Hemorrhage, Injury/Trauma, Accident
YCK Case Studies, Nature of Study, Study-Report Type

27 cases observed at time of operation are discussed with special reference to radiologic approach. Attention is given to differential diagnosis between extradural and subdural hematoma and to laceration of the brain. State-of-the-art discussion is related to authors' experience.

22-4124 S

EXTRADURAL HAEMATOMA: Observations on 125 cases. See 11-4124 S

22-4143 S

Langfitt, T. W./ Tannanbaum, H. M./ Kassel, N. F.
THE ETIOLOGY OF ACUTE BRAIN SWELLING FOLLOWING EXPERIMENTAL HEAD INJURY.
Pennsylvania Hospital, Dept. of Neurosurgery, Philadelphia. Jan. 1966. 6 p. figs. ref.
Journal of Neurosurgery, Vol. 24, Jan. 1966, pp. 47-56.
Sponsor: John A. Hartford Foundation, Inc., New York.

BIBLIOGRAPHY

JN Injury/Trauma, Accident
OANBB Brain, Central, Nervous System, Anatomy/
Body, Biomedical Aspect
VN Epidemiology/Etiology, Disciplines
YCG Laboratory Experiment, Nature of Study,
Study-Report Type
JNE Contusion/Crushing/Blunt

Authors found that experimental cerebral concussion in 34 cats caused a marked increase in intracranial pressure. Present evidence to support the concept that the rise in pressure is due to cerebrovascular congestion, which in turn is caused by cerebral vasomotor paresis.

22-4337 S
ROAD ACCIDENTS. See 03-4337

22-4500 S
Lewin, W.
FACTORS IN THE MORTALITY OF CLOSED HEAD INJURIES.
Radcliffe Infirmary, Oxford, Accident Service (England).
6 June 1953. 6 p. tables. ref.
British Medical Journal, Vol. 1, 6 June 1953, pp. 1239-1244.

OAI Head, Anatomy/Body, Biomedical Aspects
JNF Concussion, Injury/Trauma, Accident
JNP Consequences/Complications
OAF Thorax
JNK Hemorrhage
JNX Multiple Severe Injuries
YEF Data Statistics, Contents, Study-Report Type

1,000 patients. Author describes and discusses principal causes of death, emphasizing that some are preventable or amenable to treatment. Data statistics: mortality; type of brain injury, complications, other injuries.

22-4501 S
THE INCIDENCE AND SIGNIFICANCE OF SHOCK IN HEAD INJURY. See 24-4501 S

22-4503 N
White, J. C.
CARE OF THE SEVERELY INJURED PATIENT: Neurosurgical injuries.
Massachusetts General Hospital, Neurosurgical Service,
Boston. 14 Dec. 1957. 7 p. photos. ref.
American Medical Association Journal, Vol. 165, No. 15,
14 Dec. 1957.
Conference: American Medical Association, 106th annual,
7 June 1957, New York.

OAI Head, Anatomy/Body, Biomedical Aspect
OAN Nervous System
JNX Multiple Severe Injuries, Injury/Trauma, Accident
WSE Therapeutic, Medical, Methods
WSD Surgery
OANBC Spinal Cord, Central
YER General Discussions, Contents, Study-Report Type

Author describes care of the patient with acute craniocerebral injuries during the critical period (at

accident scene and in the hospital). Discusses principal causes of death and the early diagnosis of potentially fatal conditions. Lists factors requiring primary consideration in this type of patient.

22-4504 S
DIED IN HOSPITAL: A three-year study of deaths following trauma. See 21-4504 S

22-4517 S
Freytag, E.
AUTOPSY FINDINGS IN HEAD INJURIES FROM BLUNT FORCES.
Maryland Univ., Baltimore, Div. of Forensic Medicine.
April 1963. 6 p. ref. tables. charts.
Archives of Pathology, Vol. 75, April 1963, pp. 402-413.
Sponsor: Army Chemical Research and Development Laboratories, Biophysics Div., Maryland.

JNE Contusion/Crushing/Blunt, Injury/Trauma, Accident
WSI Autopsy/Pathology, Medical, Methods
YEF Data Statistics, Contents, Study-Report Type
OAI Head, Anatomy/Body, Biomedical Aspect
VN Epidemiology/Etiology, Disciplines

1,367 cases. Author analyzes gross pathological findings in cranium and brain. Concludes that secondary lesions in midbrain and pons are the most causative factor in death in head injuries. Discusses midbrain hemorrhages in infants, epidural bleeding, subdural bleeding, subarachnoid hematomas and brain contusions. Found alcohol consumption in 23% cases. Data statistics: gross pathological findings in cranium and skull; causes of death; length of survival; age; race; sex; type of accident; presence of alcohol in the blood at the time of accident.

22-4521 S
Campbell, E./ Whitfield, R. D./ Grizzard, V. T.
MORTALITY IN HEAD INJURIES.
Albany Hospital, Neurosurgical Service, New York/
Albany Medical College, Dept. of Surgery, New York. 1
Oct. 1950. 3 p. fig. tables. ref.
New York State Journal of Medicine, Vol. 50, 1 Oct.
1950, pp. 2273-2276.
Conference: Medical Society of the State of New York.
144th annual, 12 May 1950.

JNB Fatal, Injury/Trauma, Accident
OAI Head, Anatomy/Body, Biomedical Aspect
YEF Data Statistics, Contents, Study-Report Type
YCC State-of-the-Art, Nature of Study
JNP Consequences/Complications
WSE Therapeutic, Medical, Methods
XTL Airway Maintenance, Medical, Equipment

718 cases. Authors review general principles of management. Emphasize strict maintenance of clear airway. Conclude that 15 of the 60 fatalities were probably preventable. Data statistics: mortality; primary causes of death; complications.

22-4536 S
KLINISCHE ERFABRUNGEN IN DER NEURO-
CHIRURGISCHEN KLINIK ZÜRICH BEI AKUTEN
SCHÄDEL-HIRN-VERLETZUNGEN. [CLINICAL EX-

BIBLIOGRAPHY

- PERIENCES IN THE NEUROCHIRURGISCHE KLINIK ZURICH WITH ACUTE SKULL AND BRAIN INJURIES.] See 11-4536 S
- 22-4540 S
ACUTE, SUBACUTE AND CHRONIC SUBDURAL HEMATOMA. See 11-4540 S
- 23-2592 S
TRAFFIC INJURY IN BRISBANE. Report of a general survey. See 01-2592 S
- 23-3703 S
DIE KLINISCHE BEDEUTUNG DER TRAUMATISCHEN FETTEMBOLIE. [THE CLINICAL SIGNIFICANCE OF TRAUMATIC FAT EMBOLISM.] See 25-3703 S
- 23-3712 S
TREATMENT OF FLAIL CHEST INJURIES WITH A PISTON RESPIRATOR. See 13-3712 S
- 23-3713 S
EINE ANALYSE VON 827 UNFALLTODESFÄLLEN. [AN ANALYSIS OF 827 CASES OF FATAL ACCIDENTS.] See 24-3713 S
- 23-3715 S
MÖGLICHKEITEN EINER INTENSIVIERUNG DER ERSTEN HILFE FÜR UNFALLVERLETZTE IN STÄDTEN MIT LÄNDLICHER UMGEBUNG. [POSSIBILITIES FOR INTENSIFYING FIRST AID FOR ACCIDENTS IN CITIES WITH A RURAL ENVIRONMENT.] See 03-3715 S
- 23-3723 S
CLOSED THORACIC INJURIES. See 13-3723 S
- 23-3729 S
Hansen, V. G.
VERKEHRSUNFALL UND ASPIRATIONSTOD. [TRAFFIC ACCIDENTS AND ASPIRATION DEATH.] Institut für gerichtliche Medizin und Kriminalistik der Friedrich-Schiller-Universität Jena. 1957. 5 p.
Deutsche Gesundheitswesen, Vol. 12, 1957, pp. 1427-1430.
- YCC State-of-the-Art, Nature of Study, Study-Report Type
- JNPJ Aspiration, Consequences, Injury/Trauma, Accident
- Reviews literature covering about 5,000 cases. Reports of aspiration as contributing cause of death vary from 2% to 52%; as sole cause, from 0 to 34%. Contradiction is attributed to differing autopsy criteria and inadequate attention by some researchers to fat embolism.
- 23-3737 S
BERICHT ÜBER 5900 SCHÄDEL-HIRN-TRAUMEN. [REPORT ON 5900 CRANIOCEREBRAL TRAUMAS.] See 22-3737 S
- 23-3739 S
GRENZEN DER WIEDERBELEBUNG BEI SCHWEREN HIRNTRAUMEN. [LIMITS OF RESUSCITATION IN SERIOUS BRAIN TRAUMAS.] See 22-3739 S
- 23-3741 S
PULMONALE UND ENTERALE KOMPLIKATIONEN NACH HIRNSCHÄDIGUNGEN. [PULMONARY AND ENTERAL COMPLICATIONS AFTER BRAIN INJURIES.] See 11-3741 S
- 23-3743 S
DER SCHÄDELVERLETZTE AUS DER SICHT DES ARZTES AM UNFALLORT. [SKULL INJURIES AS SEEN BY THE PHYSICIAN AT THE SITE OF THE ACCIDENT.] See 03-3743 S
- 23-3744 S
DES SCHICKSAL DES AM UNFALLORT ÄRZTLICH VERSORGTE SCHÄDELHIRNVERLETZTEN. [THE OUTCOME OF THE CEREBROCRANIAL INJURY GIVEN MEDICAL CARE AT THE ACCIDENT SITE.] See 03-3744 S
- 23-3748 S
MÖGLICHKEITEN UND GRENZEN ÄRZTLICHER HILFELEISTUNGEN AM UNFALLORT. [POSSIBILITIES AND LIMITATIONS OF MEDICAL ASSISTANCE AT THE SCENE OF A DISASTER.] See 02-3748 S
- 23-3754 S
Carstensen, E./ Ewerwahn, W. J.
ERSTE BEHANDLUNG DER VERLETZUNGSFOLGEN BEI STRASSENVERKEHRUNFÄLLEN. [FIRST TREATMENT OF THE COMPLICATIONS OF INJURY WITH TRAFFIC ACCIDENT.]
16 Aug. 1957. 3 p. fig. ref.
Deutsche Medizinische Wochenschrift, Vol. 82, 16 Aug. 1957, pp. 1338-1340.
- JRGI Professional/Physician, Treatment/Care, Recovery of Injured, Accident
- YCC State-of-the-Art, Nature of Study, Study-Report Type
- YEF Data Statistics, Contents
- WSBC Maintaining Airways, First Aid, Medical, Methods
- JNPJ Aspiration/Dehydration, Consequences, Injury/Trauma
- OAI Head, Anatomy/Body, Biomedical Aspect
- A brief state-of-the-art report, mentioning the etiology of trauma in Hamburg. Autopsy records for 131 traffic fatalities were studied. 43% of deaths had occurred on the scene or en route to the hospital, 33% within the first 24 hours in the hospital.
- Brain injury is the most frequent lethal injury. 58 of the 83 victims with head injury had aspired blood to a certain degree. Authors conducted an experiment, physicians going to the scene of accidents to find how and if aspiration of blood and its consequences could be reduced. Special physician's car arrived at scene of accident after an average delay of 4.6 minutes. In 50% of the calls, they were at the scene prior to arrival of the ambulance.

From October 22, 1956 to November 10, 1956, Hamburg had 1928 traffic accidents (about 100/day), with 738 injured persons and 8 fatalities. Physician's car went to 150 calls in this period, 110 of which were traffic accidents, 26 seriously injured. Of these, 21 were unconscious, four had symptoms of fractured basis of the skull, one died on the scene and three died within 12 hours. All four had aspired massive amounts of blood.

Aspiration is said to get to the alveoli in first few seconds or minutes of occurrence, and intubation to maintain airways or suction for clearing trachea is not adequate to prevent complications. Author's opinion is that physician on the scene of accident is not necessary.

23-3763 S

Camerer, J.
DIE BEDEUTUNG DER BLUTASPIRATION ALS TODESURSACHE BEI UNFÄLLEN. [THE SIGNIFICANCE OF ASPIRATION OF BLOOD AS CAUSE OF DEATH IN ACCIDENTS.]
18 June 1943. 2 p.
Munchener Medizinische Wochenschrift, Vol. 90, 18 June 1943, pp. 377-378.

JNPJ Aspiration, Consequences, Injury/Trauma, Accident
WSI Autopsy, Medical, Methods
YEF Data Statistics, Contents, Study-Report Type

Discusses aspiration of blood, giving skull fracture as frequent cause of bleeding. Autopsy findings, lung conditions, occurrence and distribution of blood in airways are discussed. 100 autopsies in cases of blunt trauma leading to death within three hours showed aspiration of blood as cause of death in 34. Erroneous correlation between cause of death and skull fracture is cited.

23-3767 S

Holczabek, W.
TODESURSACHEN BEI FRISCHEN THORAXVERLETZUNGEN. [DEATHS CAUSES IN RECENT THORACIC INJURIES.]
Universität Wien, Institut Für Gerichtliche Medizin (Austria). Aug. 1964. 3 p. ref. figs.
Thoraxchirurgie, Vol. 12, Aug. 1964, pp. 89-93.

JNB Fatal, Injury/Trauma, Accident
OAF Thorax, Anatomy/Body, Biomedical Aspect
WSI Autopsy, Medical, Methods
YEF Data Statistics, Contents, Study-Report Type

Author stresses importance of autopsy toward the discovery of new diagnostic and therapeutic methods. With reference to blunt thoracic trauma, author points to four common causes of error in autopsy: (1) undamaged exterior thoracic surface with internal organic injury, (2) unbroken ribs, (3) external closed contusions which can lead to fatal hemorrhages but which are underestimated as cause of deaths, (4) failure to identify fractured ribs or underestimating the severity of multiple rib fractures.

In trauma victims who survived the accident for some time, the main causes of death are direct or indirect consequences of fractured ribs: fat embolism in lungs, reduced ventilation due to pneumo or hemothorax, crushed lungs, pulmonary edema, and aspiration of blood. Blood loss is also a major cause of death. Rare causes of death are discussed. A paragraph gives various references to cases of traumatic rupture of the aorta and survival

times (up to 10 days). In author's own material, of 1,589 cases of blunt trauma to the thorax, there were 75 incidences of ruptured aorta (mortality 100%; survival time up to two days, 57% died immediately; 33% survived one hour).

23-3768 S

Läuppi, E.
DIE ASPIRATION BEI OFFERN DES STRASSENVERKEHRS. [THE ASPIRATION IN VICTIMS OF TRAFFIC ACCIDENTS.]
1954. 4 p. tables.
Schweizerische Medizinische Wochenschrift, 20 March 1954, pp. 335-338.

JNPJ Aspiration, Consequences, Injury/Trauma, Accident
WSI Autopsy, Medical, Methods
WSBC Maintaining Airways, First Aid
YEF Data Statistics, Contents, Study-Report Type

A state-of-the-art review. Aspiration of blood or stomach contents was diagnosed in 300 victims of traffic accidents who died within 48 hours of the accident. Of the 43 cases (14%) in which aspiration was considered sole cause of death, 29 died on the scene of the accident and the rest within 6 hours. Some case reports.

23-3777 N

FIRST AID TREATMENT, DIAGNOSIS AND ROENTGENOGRAPHY OF MAXILLOFACIAL INJURIES.
See 02-3777 N

23-3806 S

Davis, C. M.
INHALED FOREIGN BODIES IN CHILDREN: An analysis of 40 cases.
1966. 3 p. figs. tables. ref.
Archives of Diseases in Childhood, Vol. 41, 1966, pp. 402-406.

EC Children, People
JNPJ Aspiration/Dehydration, Consequences, Injury/Trauma, Accident
YEF Data Statistics, Contents, Study-Report Type
OAL Respiratory Systems, Anatomy/Body, Biomedical Aspect

Study material covers period of ten years. Foreign objects were coughed up at hospital in two cases, 37 were removed at bronchoscopy, and one required bronchotomy. Author tabulates nature and radiopacity of foreign bodies, age distribution with an indication of the number of cases in which probable diagnosis was suggested by clinical history, and radiological appearance of lung fields. Diagnosis may be missed in patients with respiratory symptoms without indication of their underlying cause in the clinical history.

23-3812 N

LeJeune, F. E., Jr.
FOREIGN BODIES IN THE TRACHEOBRONCHIAL TREE AND ESOPHAGUS.
Dec. 1966. 7 p. illus. ref.
Surgical Clinics of North America, Vol. 46, Dec. 1966, pp. 1501-1512.

BIBLIOGRAPHY

- JNPI Aspiration/Dehydration, Consequences, Injury/Trauma, Accident
- OALD Trachea/Bronchi, Respiratory System, Anatomy/Body, Biomedical Aspect
- EC Children, People
- YER General Discussions, Contents, Study-Report Type

Major types of foreign bodies found in tracheo-bronchial tree and esophagus, proper procedure for roentgenographic observation, and techniques for removal of foreign bodies are discussed.

- 23-3841 S
CLASSIFICATION OF CHEST INJURIES AS AN AID TO TREATMENT. See 13-3841 S

- 23-3843 S
IMPAIRMENT OF RESPIRATION AFTER SPINAL CORD INJURY. See 12-3843 S

- 23-3875 S
Robertson, W. G./ Farhi, L. E.
RATE OF LUNG COLLAPSE AFTER AIRWAY OCCLUSION OF 100% O₂ AT VARIOUS AMBIENT PRESSURES.
New York State Univ., Dept. of Physiology, Buffalo. March 1965. 5 p. figs. ref.
Journal of Applied Physiology, Vol. 20, March 1965, pp. 228-232.
Contract No: AF 33(616)-6823/ NOnr-969 (03).

- XTK Oxygen Supply, Medical, Equipment
- OALE Lungs, Respiratory System, Anatomy/Body, Biomedical Aspect
- NKC Pressure, Operating Condition, Physical Aspect
- WSBC Maintaining Airways, First Aid, Medical, Methods
- L Time
- YCG Laboratory Experiment, Nature of Study, Study-Report Type

Study was conducted on rats with tracheal occlusion which breathed O₂ at various ambient pressures. Article presents mathematical relationships found between volume, time, and rate of collapse of lungs following tracheal occlusion.

- 23-3883 N
Herrero, F. A./ Walton, B. E./ Jurkiewicz, M. J.
EMERGENCY MANAGEMENT OF FACIAL FRACTURES FOLLOWING AUTOMOBILE ACCIDENTS.
Florida Univ., College of Medicine, Dept. of Surgery, Gainesville. Feb. 1965. 5 p. ref.
The American Surgeon, Vol. 31, No. 2, Feb. 1965, pp. 85-89.

- JNH Fracture, Injury/Trauma, Accident
- OAIB Face, Head, Anatomy/Body, Biomedical Aspect
- WSE Therapeutic, Medical, Methods
- YCK Case Studies, Nature of Study, Study-Report Type

Use of seat belts has saved lives but has led to increased incidence of facial fractures. Such fractures per

se do not demand emergency treatment (grace period is about one week), but they are commonly accompanied by other injuries. Emergency treatment of facial fractures includes: clearing airway, controlling hemorrhage, utilizing lateral or prone position to prevent glossal obstruction of airway by unstable mandible, and supportive measures to combat shock. Specific treatments for frontal, nasal, zygoma, maxilla, and mandible fractures are described separately. Report contains two detailed case histories.

- 23-3889 S
Weston, J. T.
AIRWAY FOREIGN BODY FATALITIES IN CHILDREN.
Philadelphia Dept. of Public Health, Office of the Medical Examiner, Pennsylvania. 1965. 5 p. photos.
American Broncho-Esophagological Association. Transactions, Vol. 45, 1965, pp. 105-113.

- OAL Respiratory System, Anatomy/Body, Biomedical Aspect
- EC Children, People
- JNN Asphyxia/Suffocation, Injury/Trauma, Accident
- YCK Case Studies, Nature of Study, Study-Report Type
- WSI Autopsy, Medical, Methods

Details of autopsy findings in fifteen Philadelphia cases, with average age of twenty-five months. Most objects were lodged in larynx, with three instances of mechanical compression of epiglottis by objects in pharynx, two instances of complete obstruction of trachea. No death was attributable to aspiration of regurgitated gastric contents. Most cases arrived dead at hospital five to fifteen minutes after occurrence.

- 23-3894 N
Schwab, J. M./ Hartman, M. M.
THE MANAGEMENT OF THE AIRWAY AND VENTILATION IN TRAUMA.
Geisinger Medical Center, Dept. of Anesthesiology, Danville, Pennsylvania. Nov. 1964. 11 p. ref.
Medical Clinics of North America, Vol. 48, Nov. 1964, pp. 1577-1597.

- YER General Discussions, Contents, Study-Report Type
- JN Injury/Trauma, Accident
- WSBC Maintaining Airways, First Aid, Medical, Methods
- X Equipment
- VN Epidemiology, Disciplines
- OANB Central, Nervous System, Anatomy/Body, Biomedical Aspect
- OAL Respiratory System
- WSC Diagnosis

Nonspecific coverage of concepts of artificial respiration and conditions in which ventilatory assistance is indicated. Advantages and disadvantages of various types of mechanical ventilators and desirable characteristics of pressure-cycled respirator are discussed. Blood-gas studies, Radford nomogram, pressures, wave form, and cardiac output are described. Discuss management of airway and ventilation in trauma according to specific injuries to head, chest, larynx, and thorax.

BIBLIOGRAPHY

23-3947 S
SEVERE CRANIOCEREBRAL TRAUMA AND RESPIRATORY ABNORMALITIES. See 22-3947 S

23-3964 N
ZUR ERSTVERSORGUNG SCHWERSTER SCHÄDELHIRNTRAUMEN. [ON FIRST AID IN VERY SEVERE CRANIOCEREBRAL TRAUMAS.] See 11-3964 N

23-3974 S
BEDEUTUNG UND BESONDERHEITEN DER ERSTEN HILFE BEI SCHWEREN SCHÄDEL-HIRNVERLETZUNGEN. [IMPORTANCE AND FEATURES OF FIRST AID IN SEVERE CRANIOCEREBRAL INJURIES.] See 22-3974 S

23-3976 S
Fischer, H.
DER TÖDLICHE VERKEHRSUNFALL AUS DER SICHT DES PATHOLOGEN. [THE FATAL TRAFFIC ACCIDENT FROM THE PATHOLOGIST'S VIEWPOINT.]
June 1962. 5 p. tables. ref.
Monatsschrift für Unfallheilkunde, Versicherungs-, and Verkehrsmedizin, Vol. 65, June 1962, pp. 210-219.

JNB Fatal, Injury/Trauma, Accident
WSI Autopsy/Pathology, Medical, Method
VN Epidemiology/Etiology, Disciplines
NKFP Period, Frequency/Time, Operating Conditions, Physical Aspect
JNX Multiple Severe Injuries
YEF Data Statistics, Contents, Study-Report Type

Author discusses etiology of trauma. Frequency of injuries to skull, brain, upper extremities, lower extremities, pelvis, vertebrae, various abdominal and thoracic organs, is given for the various categories of victims in motor vehicle accidents. Frequency of deaths within 24 hours, 48 hours, one week, two to four weeks after the accident is given. Causes of death as related to time of survival are also tabulated. A literature survey on aspiration as cause of death is discussed.

23-3979 S
NARKOSE UND INTUBATION AM UNFALLORT UND AUF DEM TRANSPORT IN DAS KRANKENHAUS. [ANESTHESIA AND INTUBATION AT THE SITE OF ACCIDENT AND TRANSPORTATION TO THE HOSPITAL.] See 03-3979 S

23-3983 S
ERFAHRUNGEN MIT DEM KÖLNER NOTFALL-ARZTWAGEN AUS UNFALLCHIRURGISCHER SICHT. [EXPERIENCES WITH THE COLOGNE EMERGENCY AMBULANCE FROM THE VIEWPOINT OF ACCIDENT SURGERY.] See 03-3983 S

23-3984 S
ÄRZTLICHE AUFGABEN BEIM TRANSPORT VON SCHWERVERLETZTEN MIT HUBSCHRAUBERN. [TASKS OF THE PHYSICIAN IN THE TRANSPORTATION OF SERIOUSLY INJURED PERSONS BY HELICOPTER.] See 04-3984 S

23-4014 S
PATTERNS OF THORACIC INJURIES IN FATAL TRAFFIC ACCIDENTS. See 24-4014 S

23-4036 N
Glass, W. M./ Goodman, M.
UNSUSPECTED FOREIGN BODIES IN THE YOUNG CHILD'S ESOPHAGUS PRESENTING WITH RESPIRATORY SYMPTOMS.
North Shore Hospital, Dept. of Otolaryngology, Long Island, New York/ Long Island Jewish Hospital, Dept. of Otolaryngology, Long Island, New York. April 1966. 6 p. figs. tables. ref.
The Laryngoscope, Vol. 76, April 1966, pp. 605-615.
Conference: American Laryngological, Rhinological and Otolological Society, Inc., Eastern Section, and New York Academy of Medicine, Section on Otolaryngology; joint meeting, 6 Jan. 1966, New York, New York.

OAJI Esophagus, Digestive System/Alimentary Tract, Anatomy/Body, Biomedical Aspect
WSC Diagnosis, Medical, Methods
OAL Respiratory System
EC Children, People

Article emphasizes that esophageal foreign bodies may lead to symptoms which are primarily respiratory rather than esophageal in nature. Nine cases of children under three years old are presented.

23-4045 S
CHEST TRAUMA WITH PNEUMOTHORAX AND HEMOTHORAX. See 13-4045 S

23-4046 N
Kennedy, A. C./ Luke, R. G./ Campbell, D./ Cannon, R. N.
COMBINED RENAL AND RESPIRATORY FAILURE AFTER TRAUMA.
Glasgow Royal Infirmary, Artificial Kidney Unit (England)/ Glasgow Royal Infirmary, Respiratory Emergency Unit (England). 21 Dec. 1963. 4 p. tables. figs. ref.
The Lancet, Vol. 2, 21 Dec. 1963, pp. 1304-1307.

JN Injury/Trauma, Accident
OAL Respiratory System, Anatomy/Body, Biomedical Aspect
OAMB Kidneys, Urogenital System
YCK Case Studies, Nature of Study, Study-Report Type

Provides case report of 20-year-old male with most intense and lengthy catabolism with acute tubular necrosis on record who survived. Patient sustained multiple injuries including visceral and pulmonary contusions following a fall. Although having no thoracic bony injuries, he needed 33 days of intermittent positive-pressure ventilation. Highly efficient artificial kidney was used. Article refers briefly to literature on renal and respiratory complications.

23-4057 N
ACUTE RENAL FAILURE FOLLOWING EXTENSIVE TRAUMA. See 24-4057 N

BIBLIOGRAPHY

23-4084 S

THE SURGICAL MANAGEMENT OF 640 CONSECUTIVE LIVER INJURIES IN CIVILIAN PRACTICE. See 15-4084 S

23-4090 S

ARZTLICHE VERSORGUNG SCHWERVERLETZTER AM UNFALLORT UND AUF DEM TRANSPORT. [TREATMENT BY PHYSICIAN OF THE SEVERELY INJURED, AT THE SCENE OF THE ACCIDENT AND DURING TRANSPORTATION.] See 03-4090 S

23-4119 S

FATAL TRAFFIC ACCIDENTS IN BRISBANE FROM 1935 TO 1964. See 21-4119 S

23-4123 S

Kuo, B. W. F.
AIR WAY FOREIGN BODIES: A series of 85 cases.
National Taiwan Univ. Hospital, Dept. of Otolaryngology, Taipei. 28 Aug. 1965. 8 p. tables, figs. ref.
Formosan Medical Association Journal, Vol. 64, No. 8, 28 Aug. 1965. pp. 512-527.

JNN Asphyxia/Suffocation, Injury/Trauma, Accident
WSBC Maintaining Airways, First Aid, Medical, Methods
YEF Data Statistics, Contents, Study-Report Type
VN Epidemiology/Etiology, Disciplines
WSC Diagnosis
JNP Consequences/Complications

Author describes and discusses types of foreign bodies, site, symptoms, removal, retention period, and unsuccessful cases. Analyzes correlation between location and chief complaints, retention time and complications. Tabulates, for each case: type of foreign body; age; sex; chief complaints; retention time; location; treatment; complications; result.

23-4128 S

Duff, J. H./ Goldstein, M./ McLean, A. P. H./ Agrawal, S. N./ Munro, D. D./ Gutelius, J. R.
FLAIL CHEST: A clinical review and physiological study.
Royal Victoria Hospital, Dept. of Surgery, Montreal (Canada)/ McGill Univ., Dept. of Surgery, Montreal (Canada). 1968. 7 p. figs. tables. ref.
Journal of Trauma, Vol. 8, No. 1, 1968, pp. 63-74.
Sponsor: Medical Research Council (Canada)/ Army Dept. (United States)/ Public Health Service.
Conference: American Association for the Surgery of Trauma, 27th annual, 28-30 Sept. 1967, Chicago, Illinois.

OAF Thorax, Anatomy/Body, Biomedical Aspect
OAFD Ribs
JNH Fracture, Injury/Trauma, Accident
JNPL Shock, Consequences/Complications
WSI Autopsy/Pathology, Medical, Methods
JNP Consequences/Complications, Injury/Trauma, Accident
WU Testing/Measures
VN Epidemiology/Etiology, Disciplines
YEF Data Statistics, Contents, Study-Report Type

Cover 70 cases with physiological studies on seven. Most common cause of death was respiratory failure. Found cardiac deficit in 4 of 7 patients. Authors discuss mortality, management of ventilation, cardiac function and pathophysiology. Conclude that mechanical ventilation helps the patient by decreasing energy expenditure and so reducing oxygen need. Data statistics: nature of injury; location of unstable area of chest wall; delay in diagnosis and mortality; shock and mortality; associated major injuries; methods of management and mortality; major complications; causes of death.

23-4146 S

PENETRATING WOUNDS OF THE ABDOMEN: Analysis of 776 operative cases. See 15-4146 S

23-4337 S

ROAD ACCIDENTS. See 03-4337 S

23-4502 S

ACUTE HEAD INJURY: A review of one thousand cases. See 11-4502 S

23-4504 S

DIED IN HOSPITAL: A three-year study of deaths following trauma. See 21-4504 S

23-4513 S

ÜBER DIE RIPPENSERIENFRAKTUREN DURCH VERKEHRSUNFÄLLE UND DEN DERZEITIGEN STANDIHRER BEHANDLUNG. [ON SERIAL RIB FRACTURES CAUSED BY TRAFFIC ACCIDENTS AND THE CURRENT STATUS OF THEIR TREATMENT.] See 24-4513 S

23-4534 S

LA CAUSA DI MORTE NEI TRAUMATIZZATI: Studio clinico-statistico ed anatomico-patologico. [CAUSE OF DEATH IN TRAUMATIZED PATIENTS: Clincio-statistical and anatomico-pathologic study.] See 25-4534 S

24-2592 S

TRAFFIC INJURY IN BRISBANE. Report of a general survey. See 01-2592 S

24-3701 S

SURGICAL MANAGEMENT OF SPLENIC INJURIES. See 15-3701 S

24-3702 S

ARTERIAL INJURIES OF THE BASE OF THE NECK. See 12-3702 S

24-3710 S

Braunstein, P. W./ Skudder, P. A./ McCarroll, J. R./ Musolino, A./ Wade, P. A.
CONCEALED HEMORRHAGE DUE TO PELVIC FRACTURE.

Cornell Univ. Medical College, New York, New York.
1964. 4 p. photos. tables.
Journal of Trauma, Vol. 4, 1964, pp. 832-838.
Conference: American Association for the Surgery of
Trauma, 23th annual, 24-26 Oct. 1963, San Francisco,
California.

JNK Hemorrhage, Injury/Trauma, Accident
JNH Fracture
OAE Abdomen, Anatomy/Body, Biomedical Aspect
EM Pedestrians, People
JNB Fatal

Authors compare an autopsy study in 1959 of 200
fatally injured pedestrians with a study in 1963 of 500
pedestrians struck down by automobiles but not fatally
injured. 45% of the fatal group and only 4% of the
nonfatal group had pelvic fractures. Warns that pelvic
fractures may be a cause of severe and often unrecognized
retroperitoneal hemorrhage.

24-3713 S

Brandesky, G./Lorbek, W.
EINE ANALYSE VON 827 UNFALLTODESFÄLLEN.
[AN ANALYSIS OF 827 CASES OF FATAL ACCI-
DENTS.]
Chirurgischen Universitätsklinik in Wien (Austria). 16
Oct. 1964. 4 p. graphs. tables.
Wiener klinische Wochenschrift, Vol. 76, 16 Oct. 1964.
pp. 712-715.

WSI Autopsy, Medical, Methods
YEF Data Statistics, Contents, Study-Report Type
DE Motor Vehicles, Vehicle
L Time
OAI Head, Anatomy/Body, Biomedical Aspect
JNPI Fat Embolism, Consequences, Injury/Trauma,
Accident
JNK Hemorrhage
JNX Multiple Severe Injuries
OAK Cardiovascular System

In a period of nine years, 131,625 emergency cases
were seen. Etiology and mortality, age distribution of
fatal cases, and frequency of traffic and non-traffic
fatalities listed by the type of injury involved are given.

Causes of death are tabulated. Incidence of head and
brain injury is highest, second is fat embolism, followed
by death from loss of blood.

One hundred and twenty-two cases of lethal fat
embolism are tabulated by age, sex, type of fracture,
other conditions observed at autopsy, and time elapsed
between accident and death. Another tabulation presents
diagnosis, age, accident description, condition admission,
time of survival and concurrent injuries for special cases
of injuries to the heart and great vessels.

Emphasizes conditions where better first aid and/or
medical care would have prevented fatal outcome.

Graph reflects time-related mortality curve (in % of
total population of fatalities on y axis, and time to death
on x axis) for traffic accidents and non-traffic cases.

24-3715 S

**MÖGLICHKEITEN EINER INTENSIVIERUNG DER
ERSTEN HILFE FÜR UNFALLVERLETZTE IN
STÄDTEN MIT LÄNDLICHER UMGEBUNG.**
[POSSIBILITIES FOR INTENSIFYING FIRST AID
FOR ACCIDENTS IN CITIES WITH A RURAL ENVIR-
ONMENT.] See 03-3715 S

24-3735 N

Hügin, W.
**ÜBER DIE INDIKATION DER INTRAVENÖSEN UND
INTRAARTERIELLEN TRANSFUSION BEIM
BLUTUNGS-SCHOCK.** [ABOUT THE INDICATION OF
INTRA-VEIN AND INTRA-ARTERIAL TRANS-
FUSION IN HEMORRHAGIC SHOCK.]
1952. 3 p. ref.
Helvetica Chirurgica Acta, Vol. 19, 1952, pp. 86-91.

JNK Hemorrhage, Injury/Trauma, Accident
JNPL Shock, Consequences
WSE Therapeutic, Medical, Methods
OAKCB Arteries, Blood Vessels, Cardiovascular System,
Anatomy/Body, Biomedical Aspect

State-of-the-art report is given. Intraarterial blood
transfusion is preferable to I.V. infusion in certain
conditions, and indicated in specific cases. It is useful
mainly in severe shock following loss of blood, to secure a
rapid rise of the blood pressure as well as replenishment
of the vascular system. The advantage is reduced risk of
failure of the right cardiac ventricle.

24-3738 S

**BESONDERE KREISLAUFREAKTIONEN IM AKUTEN
STADIUM DER SCHÄDEL-HIRNSCHÄDIGUNGEN.**
[SPECIAL CIRCULATORY REACTIONS IN THE ACUTE
STAGE OF CRANIOCEREBRAL INJURIES.] See
11-3738 S

24-3748 S

**MÖGLICHKEITEN UND GRENZEN ÄRZTLICHER
HILFELEISTUNGEN AM UNFALLORT.** [POSSI-
BILITIES AND LIMITATIONS OF MEDICAL ASSIS-
TANCE AT THE SCENE OF A DISASTER.] See
02-3784 S

24-3755 N

Lindenschmidt, T. O.
**TRAUMATISCHER UND POSTOPERATIVER
SCHOCK.** [TRAUMATIC AND POSTOPERATIVE
SHOCK.]
25 Oct. 1963. 9 p. figs. ref.
Münchener Medizinische Wochenschrift, Vol. 105, 25
Oct. 1963, pp. 2105-2113.

JNPL Shock, Consequences, Injury/Trauma, Accident
YCC State-of-the-Art, Nature of Study, Study-
Report Type
YCK Case Studies
WSE Therapeutic, Medical, Methods
JNPI Fat Embolism

Emphasizes importance of immediate infusion of
plasma expanders, plasma or blood, and early treatment
of shock. Examines influence of pre-existing metabolic
disorders on the course of shock and its therapy.
Discusses prophylaxis and therapy of fat embolism as
cause of shock.

24-3767 S

**TODESURSACHEN BEI FRISCHEN THORAXVERLET-
ZUNGEN.** [DEATH CAUSES IN RECENT THORACIC
INJURIES.] See 23-3767 S

BIBLIOGRAPHY

24-3770 N
Atik, M.
MASSIVE LIVER INJURY AND SHOCK.
Louisville Univ. School of Medicine, Kentucky. Feb. 1966. 2 p. ref.
Kentucky Medical Association Journal, Vol. 64, Feb. 1966, pp. 143-144.
Grant No: HE-09431.
Sponsor: National Institutes of Health.
Conference: American College of Surgeons, Kentucky Chapter, 23 Sept. 1965.

JN Injury/Trauma, Accident
JNPL Shock, Consequences
OAJM Liver, Digestive System/Alimentary Tract, Anatomy/Body, Biomedical Aspect
YCG Laboratory Experiment, Nature of Study, Study-Report Type
WSE Therapeutic, Medical, Methods

Author presents clinical material and experimental data to indicate that retention of devitalized liver tissue, rather than loss of functional liver parenchyma, is responsible for severity of shock associated with massive liver injury. Recommendations include partial or total hepatic lobectomy to remove devitalized tissue.

24-3772 S
REPORT ON 41 CASES OF RUPTURE OF THE SPLEEN. See 15-3772 S

24-3784 N
THE MANAGEMENT OF HEAD INJURIES COMPLICATED BY MAJOR EXTRACRANIAL TRAUMA. See 11-3784 N

24-3787 S
HEMORRHAGIC SHOCK AND FAT EMBOLISM: A clinical and experimental study. See 25-3787 S

24-3790 S
COMPLICATIONS ASSOCIATED WITH FRACTURES OF THE PELVIS. See 16-3790 S

24-3796 S
McPherson, R. C./ Haller, J. A., Jr.
THE EFFECT OF DIGITALIZATION IN IRREVERSIBLE HEMORRHAGIC SHOCK.
Louisville Univ. School of Medicine, Dept. of Surgery, Louisville, Kentucky. 1963. 6 p. tables. ref. figs.
Journal of Trauma, Vol. 3, 1963, pp. 243-253.
Sponsor: Kentucky Heart Association.
Conference: American Association for the Surgery of Trauma, 22nd annual, 29-31 Oct. 1962, Hot Springs, Virginia.

JNPL Shock, Consequences, Injury/Trauma, Accident
OAKB Heart, Cardiovascular System, Anatomy/Body, Biomedical Aspect
YCG Laboratory Experiment, Nature of Study, Study-Report Type

35 dogs in three groups were given ouabain either after irreversible shock was established, prior to hemorrhage, or during hemorrhage. Results indicate myocardial failure

takes place during shock but is not related to onset of irreversibility. Results do not justify use of digitalis preparations to prevent irreversible shock, but only to support myocardium during rapid or massive blood replacement.

24-3792 S
CAUSES OF SHOCK WITH HEAD INJURY. See 11-3792 S

24-3798 S
THORACIC TRAUMA: Analysis of 1022 cases. See 13-3798 S

24-3801 S
INJURIES OF THE LIVER IN 300 CONSECUTIVE PATIENTS. See 15-3801 S

24-3804 S
Sambhi, M. P./ Weil, M. H./ Udhoji, V. N.
ACUTE PHARMACODYNAMIC EFFECTS OF GLUCOCORTICOIDS: Cardiac output and related hemodynamic changes in normal subjects and patients in shock.
Southern California Univ. School of Medicine, Shock Research Unit/ Southern California Univ. School of Medicine, Dept. of Medicine/ Los Angeles County Hospital, California. 1965. 5 p. figs. ref. tables.
Circulation, Vol. XXXI, April 1965, pp. 523-530.
Grant No: H-5570.
Sponsor: John A. Hartford Foundation, Inc., New York/ National Heart Institute.

OAK Cardiovascular System, Anatomy/Body, Biomedical Aspect
JNPL Shock, Consequences, Injury/Trauma, Accident
YCH Field Experiment, Nature of Study, Study-Report Type
YEF Data Statistics, Contents

Cardiac output and intravascular pressure were measured before and after large doses of glucocorticosteroids were administered intravenously to nine normal and nine unselected subjects and nine patients in shock. Pharmacologic effects, their possible underlying mechanisms, and implications for treatment of shock are discussed.

24-3809 N
Weil, M. H./ Shubin, H./ Rand, W.
EXPERIENCE WITH A DIGITAL COMPUTER FOR STUDY AND IMPROVED MANAGEMENT OF THE CRITICALLY ILL.
Southern California Univ. School of Medicine, Shock Research Unit/ Los Angeles County General Hospital, California. 28 Nov. 1966. 6 p. ref. figs.
American Medical Association Journal, Vol. 198, No. 9, 28 Nov. 1966, pp. 1011-16.

WNB Models/Modeling, Systems Analysis/Operations Research, Methods
OAK Cardiovascular System, Anatomy/Body, Biomedical Aspect
XK Computers, Equipment
JNPL Shock, Consequences, Injury/Trauma, Accident
YCB Research, Nature of Study, Study-Report Type

Describes the Shock Research Unit and computer system, including reliable operation unattended by specialized computer personnel. Information on patient condition is obtained by sensing devices including pressure transducers, electrodes for EKG, thermistors, an optical desitometer to determine cardiac output, and a unit to measure urine flow. Signals are coded, checked, and printed out for the attending physician. As often as every five minutes, cardiac output, peripheral vascular resistance, appearance and mean circulation time of dye, central blood volume, and total work of the heart are automatically reported. Plasma volume, red blood cell mass, pH, Pco₂, and Po₂ are determined. Arterial and venous pressures, heart and respiratory rate, temperature, and urine output may be obtained every minute.

Limitations of present system are discussed. Data will be used for simulation studies, statistical analyses, construction of mathematical models of basic pathophysiology, and techniques for using models to simulate and predict the effects of treatment.

24-3810 N

Shubin, H./ Weil, M. H.
EFFICIENT MONITORING WITH A DIGITAL COMPUTER OF CARDIOVASCULAR FUNCTION IN SERIOUSLY ILL PATIENTS.

Southern California Univ. School of Medicine, Shock Research Unit/ Los Angeles County General Hospital, California. Sept. 1966. 5 p. ref. figs. tables.
Annals of Internal Medicine, Vol. 65, No. 3, Sept. 1966, pp. 453-460.

WNB Models/Modeling, Systems Analysis/Operations Research, Methods
OAK Cardiovascular System, Anatomy/Body, Biomedical Aspect
XK Computers, Equipment
JNPL Shock, Consequences, Injury/Trauma, Accident
YCB Research, Nature of Study, Study-Report Type
L Time

Describe the functions of an IBM 1710 installed at Los Angeles County General Hospital to permit rapid quantitative assessment of hemodynamic, metabolic, and respiratory status of patients brought to Shock Research Unit. Various sensors provide readings for temperature, ECG, central venous pressure, arterial pressure, dye dilution curves for cardiac output and output of urine; respiratory, heart, and pulse rates are also established. Data are used to develop mathematical models of patient response to various modes of treatment.

24-3822 N

Weil, M. H./ Shubin, H./ Rosoff, L.
FLUID REPLETION IN CIRCULATORY SHOCK: Central venous pressure and other practical guides.

Southern California Univ. School of Medicine, Shock Research Unit/ Southern California Univ., School of Medicine, Dept. of Medicine/ Southern California Univ. School of Medicine, Dept. of Surgery/ Los Angeles County Hospital, California. 24 May 1965. 7 p. figs. ref.
American Medical Association Journal, Vol. 192, No. 8, 24 May 1965, pp. 84-90.

JNPL Shock, Consequences, Injury/Trauma, Accident
WUPD Blood Pressure, Physiological, Testing/Measures, Methods

YER General Discussions, Contents, Study-Report Type

Discuss measurement of central venous pressure and its importance for evaluating patient in shock. Measurement of central blood pressure provides diagnosis for "pseudoshock" of heart failure. Pulse rate, hemoglobin and hematocrit values do not reflect severity or cause of shock and fail as dependable guides for the bedside physician. Management of shock is discussed. Case report is given.

24-3829 S

PENETRATING WOUNDS OF THE PERICARDIUM OR ITS CONTENTS. See 14-3829 S

24-3832 S

Longerbeam, J. K./ Vannix, R./ Wagner, W./ Joergenson, E.

CENTRAL VENOUS PRESSURE MONITORING: A useful guide to fluid therapy during shock and other forms of cardiovascular stress.

Aug. 1965. 6 p. figs. ref. tables.

American Journal of Surgery, Vol. 110, Aug. 1965. pp. 220-230.

Conference: Pacific Coast Surgical Association, 22-25 Feb. 1965, Vancouver, British Columbia.

WSE Therapeutic, Medical, Methods
JNPL Shock, Consequences, Injury/Trauma, Accident
WUPD Blood Pressure, Physiological, Testing/Measures
JNP Consequences
YER General Discussions, Contents, Study-Report Type

Historical review contains summary of technical advances in cannulation of central venous system and monitoring. Anatomy of subclavian area and authors' technique successfully employed on 115 patients are described in detail. Central venous pressure is rarely a linear function of blood volume but relates to rate of venous return compared with myocardial competency.

24-3838 S

Wilson, J. N.

RATIONAL APPROACH TO MANAGEMENT OF CLINICAL SHOCK.

St. Joseph Hospital, Dept. of Research, Denver, Colorado/ Colorado Univ., Medical Center, Dept. of Surgery, Denver. July 1965. 15 p. tables. ref.

Archives of Surgery, Vol. 91, July 1965, pp. 92-120.

Conference: Central Surgical Association, 22nd annual, 4-6 March 1965, Milwaukee.

WSE Therapeutic, Medical, Methods
JNPL Shock, Consequences, Injury/Trauma, Accident
YCD Survey, Nature of Study, Study-Report Type
YEF Data Statistics, Contents
YEG Tables/Graphs
OAK Cardiovascular System, Anatomy/Body, Biomedical Aspect
WUPD Blood Pressure, Physiological, Testing/Measures
YCK Case Studies

Chief problem in management of shock is to identify accurately the circulatory defect present. Sequence in management is establishment of adequate respiratory

BIBLIOGRAPHY

support, ruling out of hypovolemia, evaluation of cardiac insufficiency, and consideration of decreased vascular tone. Three types of clinical shock are hypovolemia, cardiac insufficiency, and deficient vascular tone. Each type has a unique combination of physiologic characteristics which can be identified at the bedside with light reflection oximetry and central venous pressure monitoring. Paper is based on observations of 52 patients, and detailed data on 13 is presented in charts.

24-3842 S

INJURIES OF THE KIDNEY. See 15-3842 S

24-3844 S

Shubin, H./ Weil, M. H.

THE MECHANISM OF SHOCK FOLLOWING SUICIDAL DOSES OF BARBITURATES, NARCOTICS AND TRANQUILIZER DRUGS, WITH OBSERVATIONS ON THE EFFECTS OF TREATMENT.

Southern California Univ. School of Medicine, Shock Research Unit/ Los Angeles County Hospital, California. June 1965. 6 p. figs. tables. ref.

American Journal of Medicine, Vol. 38, June 1965, pp. 853-863.

Grant No: HE-05570/ HE-07811.

Sponsor: John A. Hartford Foundation, Inc., New York/ Public Health Service.

JNPL Shock, Consequences, Injury/Trauma, Accident
PCCC Suicide, Typologies/Clinical Diagnosis, Personality, Psychological Aspect
YEG Tables/Graphs, Contents, Study-Report Type
YEF Data Statistics
WUPD Blood Pressure, Physiological, Testing/Measures, Methods
OAK Cardiovascular System, Anatomy/Body, Biomedical Aspect

Describe mechanism of shock and treatment in fifteen potential suicide cases, five of whom died. Hypotension and clinical features of shock were attributable to either an absolute reduction in plasma volume or a relative hypovolemia in relation to an expanded vascular bed.

The hemodynamic findings were compared with those of a control group, and the significance level of the difference was established. The effect of infusion of a large amount of crystalloids on the cardiac output, arterial pressure, venous pressure, and urinary flow were tested. Serial measurements in relation to treatment in time after admission (from one-half hour to 32 hours) are given for metaraminol and levarterenol.

24-3866 S

NONPENETRATING INJURIES OF ABDOMEN CAUSING RUPTURE OF SPLEEN: Report of 100 cases. See 15-3866 S

24-3879 S

LIVER INJURIES IN NORTHERN IRELAND. See 15-3879 S

24-3882 S

THE PATHOLOGY OF PEDESTRIAN AUTOMOTIVE ACCIDENT VICTIMS. See 21-3882 S

24-3890 N

Wilson, J. N.

TREATMENT OF TRAUMATIC SHOCK.

St. Joseph's Hospital, Dept. of Research, Denver, Colorado. 1965. 8 p. tables. fig.

Modern Treatment, Vol. 2, 1965, pp. 708-723.

WSE Therapeutic, Medical, Methods
JNPL Shock, Consequences, Injury/Trauma, Accident
WU Testing/Measures, Methods
OAK Cardiovascular System, Anatomy/Body, Biomedical Aspect

Evaluating cause of shock in a given patient as a basis for corrective therapy, hemodynamic criteria to classify shock are discussed. Functional tests are indicated for hypovolemia, cardiac insufficiency, and deficient vascular tone. An order of examination is advised to reach diagnosis. Use of vasopressor drugs and observation of urinary output are mentioned.

24-3891 S

SURGICAL EXPERIENCE WITH 103 TRUNCAL SHOT-GUN WOUNDS. See 15-3891 S

24-3896 S

Smith, L. L./ Muller, W./ Hinshaw, D. B.

THE MANAGEMENT OF EXPERIMENTAL ENDOTOXIN SHOCK: The circulatory effects of Levarterenol, Hydrocortisone, Phenoxybenzamine, Hydrochloride, and blood volume expansion.

Loma Linda Univ., School of Medicine, Dept. of Surgery, Los Angeles, California/ Loma Linda Univ., School of Medicine, Surgical Research Laboratory, Los Angeles, California. Oct. 1964. 4 p. graphs. ref.

Archives of Surgery, Vol. 89, Oct. 1964, pp. 630-636.

Grant No: HE-4639.

Sponsor: National Heart Institute.

WSI Autopsy, Medical, Methods
JNPL Shock, Consequences, Injury/Trauma, Accident
WSDF Experimental, Surgery
YCG Laboratory Experiment, Nature of Study, Study-Report Type
OAK Cardiovascular System, Anatomy/Body, Biomedical Aspect
WU Testing/Measures

Shock associated with infection is a serious complication with high mortality. Laboratory experiments with 30 dogs provided information regarding effect of vasopressors and corticosteroids on cardiovascular system in experimental endotoxin shock, which resembles septic shock. Hepatic outflow obstruction appears to be cause of acute hepatic congestion and portal hypertension observed after administration of endotoxin. Pharmacologic doses of corticosteroids improved blood pressure, cardiac output, and survival. Plasma-volume expansion with dextran was most beneficial overall method.

24-3897 S

Lillehei, R. C./ Longerbeam, J. K./ Bloch, J. H./ Manax, W. G.

THE NATURE OF IRREVERSIBLE SHOCK: Experimental and clinical observations.

Minnesota Univ., Medical School, Dept. of Surgery, Minneapolis. Oct. 1964. 15 p. figs. graphs. tables. ref.

BIBLIOGRAPHY

Annals of Surgery, Vol. 160, No. 4, Oct. 1964, pp. 682-710.
Grant No: 02941.
Contract No: DA049-193-MD-2539.
Sponsor: Army Medical Research and Development Command/ Minnesota Heart Association.

JNPL Shock, Consequences, Injury/Trauma, Accident
YCG Laboratory Experiment, Nature of Study, Study-Report Type
YEF Data Statistics, Contents
YEG Tables/Graphs
WU Testing/Measures, Methods
OAK Cardiovascular System, Anatomy/Body, Bio-medical Aspect

Poor response to blood or blood infusion is criterion for irreversible shock, frequently caused by infection with gram-negative bacteria. Through laboratory experiments involving hundreds of dogs, authors observed shock induced by hemorrhage, bacterial endotoxins, epinephrine, and myocardial failure. Authors deduce "unitarian" theory of nature of shock, i.e., hemodynamic disturbance of peripheral vascular system in both its reversible and irreversible manifestations. Period of reversible shock lasts 2-3 hours in dog, regardless of original insult. Authors currently use hydrocortisone or phenoxybenzamine to remedy disturbed peripheral circulation in treating shock from all causes.

24-3898 N

Hopkins, R. W./ Fratianne, R./ Penn, I./ Sabga, G./ Simeone, F. A.
CONTROLLED HYPOTENSION IN THE MANAGEMENT OF SEVERE HEMORRHAGE.
Western Reserve Univ. School of Medicine, Dept. of Surgery, Cleveland, Ohio/ Cleveland Metropolitan General Hospital, Ohio. Oct. 1964. 7 p. graphs. figs. ref.
Annals of Surgery, Vol. 160, No. 4, Oct. 1964, pp. 669-681.
Contract No: DA-49-193-MD-2022.

JNK Hemorrhage, Injury/Trauma, Accident
WUPD Blood Pressure, Physiological, Testing/Measures, Methods
WSE Therapeutic, Medical
L Time
YCK Case Studies, Nature of Study, Study-Report Type

Discuss use of trimethaphan camphorsulfonate to produce controlled normovolemic hypotension. Case reports of five patients include one with ruptured aorta, another with multiple pelvic injuries. Bleeding was markedly reduced with application of trimethaphan. Normovolemic hypotension appeared to be tolerated well.

24-3903 S

Schweizer, O./ Howland, W. S.
METABOLIC CHANGES ASSOCIATED WITH HEMORRHAGIC SHOCK.
Memorial Hospital Sloan-Kettering Cancer Center, Dept. of Anesthesiology, New York. July-Aug. 1964. 7 p. tables. ref.
Anesthesia and Analgesia. .Current Researches, Vol. 43, No. 4, July-Aug. 1964, pp. 420-432.
Conference: International Anesthesia Research Society, 38th Congress, 15-19 March 1964, Las Vegas, Nevada.

JNK Hemorrhage, Injury/Trauma, Accident
JNPL Shock, Consequences
YEF Data Statistics, Contents, Study-Report Type
WSD Surgery, Medical, Methods
VN Epidemiology, Disciplines

In study of 24 cases, authors observed marked rise in lactate and pyruvate in all patients who received massive blood replacements, indicating that the use of sodium bicarbonate may effectively reduce mortality in patients who receive over 10 units of bank blood. Data statistics: analysis of bank blood; preoperative complications; operation, duration of operation, and anesthetic agent; pyruvate, lactate and bicarbonate levels; changes in pyruvate and lactate levels during operation.

24-3934 N

Crowell, J. W./ Smith, E. E.
OXYGEN DEFICIT AND IRREVERSIBLE HEMORRHAGIC SHOCK.
Mississippi Univ. Medical Center, Dept. of Physiology and Biophysics, Jackson. Feb. 1964. 4 p. figs.
American Journal of Physiology, Vol. 206, Feb. 1964, pp. 313-316.
Sponsor: National Institute of Health/ American Heart Association.

JNPL Shock, Consequences/Complications, Injury/Trauma, Accident
JNPM Anoxia/Hypoxia
YCG Laboratory Experiment, Nature of Study, Study-Report Type
WU Testing/Measures, Methods
YEG Tables/Graphs, Contents, Study-Report Type

Authors describe method for quantitative measurement of hypoxia in dogs. They determined LD₅₀. According to this criterion, digitalization increased survival. Dibenzylene, epinephrine, norepinephrine, and prior conditioning to shock had no effect.

24-3935 S

Gomez Povina, O. A./ Canepa, J. F./ Mejia, R. H.
SURVIVAL TIME IN DIFFERENT TYPES OF SHOCK WITH SIMILAR HYPOVOLEMIC LEVELS.
1964. 3 p. tables. ref.
Acta Physiologica Latino Americana, Vol. 14, 1964, pp. 361-365.

L Time
JNPL Shock, Consequences/Complications, Injury/Trauma, Accident
JNK Hemorrhage
YCG Laboratory Experiment, Nature of Study, Study-Report Type

Assuming that hypovolemia is not the only factor determining length of survival in non-hemorrhagic hypovolemic shock, experiment compared survival time of dogs subjected to similar levels of hypovolemia hemorrhagic and non-hemorrhagic hypovolemia-inducing techniques. Techniques included occlusion of portal vein, simultaneous occlusion of portal vein and hepatic artery, and acute hemorrhage. Total interruption of hepatic irrigation was followed by significant decrease in survival time compared to reduced hepatic flow.

BIBLIOGRAPHY

24-3940 S

Blair, E./ Henning, G./ Esmond, W. G./ Attar, S./ Cowley, R. A./ Michaelis, M.

THE EFFECT OF HYPERBARIC OXYGENATION (OHP) ON THREE FORMS OF SHOCK--TRAUMATIC, HEMORRHAGIC, AND SEPTIC.

Maryland Univ. School of Medicine, Dept. of Surgery, Clinical Shock Unit, Baltimore/ Maryland Univ. School of Medicine, Dept. of Surgery, Research Laboratories, Baltimore. 1964. 6 p. figs. ref.

Journal of Trauma, Vol. 4, 1964, pp. 652-663.

Grant No: DA-48-193-MD-2229/ HE-06154-2/ 5-K3-HE-4232-03.

Sponsor: Army Research and Development Command/ Public Health Service.

Conference: American Association for the Surgery of Trauma, 23rd annual, 24-26 Oct. 1963, San Francisco, California.

- JNPL Shock, Consequences/Complications, Injury/Trauma, Accident
- XTK Oxygen Supply, Medical, Equipment
- JNK Hemorrhage
- YEF Data Statistics, Contents, Study-Report Type
- YCG Laboratory Experiment, Nature of Study

Shock was induced experimentally in dogs and rats. Heart rate, mean arterial blood pressure, arterial oxygen, arterial Pco₂, and pH are shown before and during shock, and after reinfusion for hemorrhagic and septic shock. Effect of hyperbaric oxygenation on survival is shown for all three types. Dogs failed to respond to OHP only in bacteremic shock. Authors question validity of the proposed unitary theory for the irreversibility of shock.

24-3952 N

Wolfson, L. J.

BLOOD LOSS IN TRAUMA.

Birmingham Accident Hospital (England). Sept. 1963. 4 p. ref.

London. Royal College of Surgeons of England, Annals, Vol. 33, Sept. 1963. pp. 158-164.

- JNK Hemorrhage, Injury/Trauma, Accident
- JNX Multiple Severe Injuries
- YER General Discussion, Contents, Study-Report Type
- YCC State-of-the-Art, Nature of Study

General discussion is presented by consultant anaesthetist at Birmingham Accident Hospital. Discusses multiple sources of bleeding, assessment of blood loss, and clinical results. Author believes that quantities of blood required in major injuries are greatly in excess of those commonly used and warns against treating shock while neglecting oligoemia.

24-3954 N

Peterson, C. G./ Haugen, F. P.

HEMORRHAGIC SHOCK AND THE NERVOUS SYSTEM.

Oregon Univ. Medical School, Dept. of Surgery, Portland/ Oregon Univ. Medical School, Div. of Anesthesiology, Portland. Aug. 1963. 6 p. figs. ref.

American Journal of Surgery, Vol. 106, Aug. 1963, pp. 233-242.

Grant No: NB-02082.

Sponsor: National Institutes of Health/ Public Health Service/ Oregon Heart Association.

Conference: Pacific Coast Surgical Association, annual, 3-6 Feb. 1963, Palm Springs, California.

- JNPL Shock, Consequences, Injury/Trauma, Accident
- OAN Nervous System, Anatomy/Body, Biomedical Aspect
- YCG Laboratory Experiment, Nature of Study, Study-Report Type
- YCC State-of-the-Art

Article presents preliminary report on laboratory experiments investigating nervous system activity during reversible and irreversible phase of graded hemorrhagic shock. Electrophysiologic techniques and Western Reserve shock model were used. Findings are consistent with interpretation that central nervous system deterioration in hemorrhagic shock is consequence of progressive oxygen debt.

24-3958 N

Yasargil, E. C.

SCHOCKBEGRIFF IM WANDEL DER ZEITEN UND HEUTE. III: Richtlinien zur systematischen Behandlung des Schocks und der Fettembolie. [CONCEPT OF SHOCK IN THE PAST AND TODAY. 3. Directions for the systematic treatment of shock and fat embolism.]

Chirurgischen Universitätsklinik Basel (Germany). 22 Aug. 1964. 8 p. tables. ref.

Schweizerische Medizinische Wochenschrift, Vol. 94, 22 Aug. 1964, pp. 1165-1172.

- JNPL Shock, Consequences/Complications, Injury/Trauma, Accident
- JNPI Fat Embolism
- WSE Therapeutic, Medical, Methods

Author discusses urinary flow, venesection, pulse and BP control, determination of blood loss, pain relief drugs, oxygen supply, X rays, intubation, tracheostomy, drainage of the pleura, emergency thoracotomy, laparoscopy, and laparotomy as diagnostic measures and controls, then presents various kinds of therapy, including those for conditions of fat-embolism.

24-3968 N

Lindenschmidt, T. O.

TRAUMATISCHER SCHOCK: Pathophysiologische Grundlagen-Therapeutische Konsequenzen. [TRAUMATIC SHOCK: Pathophysiological causes-therapeutic results.]

Chirurgischen Abteilung des Allgemeinen Krankenhauses Barmbek, II, Hamburg (Germany). April 1965. 5 p. figs. ref.

Chirurg, Vol. 36, April 1965, pp. 145-149.

- JNPL Shock, Consequences/Complications, Injury/Trauma, Accident
- WSE Therapeutic, Medical, Methods
- OBM Metabolism, Problems, Biomedical Aspect
- YCC State-of-the-Art, Nature of Study, Study-Report Type
- JNP Consequences/Complications

Author discusses shock, defining various types of shock and giving a recommended therapy for each. On the basis of a series of examples of brain injury associated with other conditions of trauma (fat embolism, pulmonary edema, anoxia, cardiac arrest, fractures), author

discusses his own experience. The condition of shock in diabetics is discussed.

24-4005 S

ANALYSIS OF 500 STAB WOUNDS OF THE ABDOMEN. See 15-4005 S

24-4014 S

Kemmerer, W. T./ Eckert, W. G./ Gathright, J. B./ Reemtsma, K./ Creech, O., Jr.
PATTERNS OF THORACIC INJURIES IN FATAL TRAFFIC ACCIDENTS.

Tulane Univ. School of Medicine, Dept. of Surgery, New Orleans, Louisiana/ Charity Hospital, Tulane Surgical Service, New Orleans, Louisiana. Nov. 1961. 3 p. tables. *Journal of Trauma*, Vol. 1, Nov. 1961, pp. 595-599.

JNB Fatal, Injury/Trauma, Accident
OAF Thorax, Anatomy/Body, Biomedical Aspect
VN Epidemiology/Etiology, Disciplines
OAL Respiratory System
OAKC Blood Vessels, Cardiovascular System
YEF Data Statistics, Contents, Study-Report Type

Analysis of 585 traffic deaths showed 294 with significant thoracic injuries. Authors present and discuss data. Data statistics: types of thoracic injuries; thoracic injuries in 29 cases of sternal fracture; thoracic injuries in 30 cases of ruptured diaphragm; location of thoracic great vessel injury in 58 cases.

24-4020 S

Clarke, R./ Topley, E./ Fisher, M. R./ Davies, J. W. L.
EXTENT AND TIME OF BLOOD-LOSS AFTER CIVILIAN INJURY.

Birmingham Accident Hospital, Industrial Injuries and Burns Research Unit (England). 19 Aug. 1961. 6 p. graphs. ref.

The Lancet, Vol. 2, 19 Aug. 1961, pp. 381-386.

JN Injury/Trauma, Accident
JNK Hemorrhage
NKFP Period, Frequency/Time, Operating Conditions, Physical Aspect
OARC Blood, Body Fluids, Anatomy/Body, Biomedical Aspect
WU Testing/Measures, Methods

Total blood loss in 140 patients. Repeated estimations of blood volume in 75 patients. Authors describe and discuss blood loss from different sites of injury. Discuss measurement and clinical assessment of blood loss. Tabulate and graph blood loss, according to time, for selected injuries.

24-4022 S

CIVILIAN PENETRATING WOUNDS OF THE ABDOMEN. See 15-4022 S

24-4043 N

Cook, F. W./ Haller, J. A., Jr.
PENETRATING INJURIES OF THE SUBCLAVIAN VESSELS WITH ASSOCIATED VENOUS COMPLICATIONS.

Louisville Univ. School of Medicine, Dept. of Surgery, Kentucky/ Louisville General Hospital, Kentucky. March 1962. 2 p. figs. biblio.

Annals of Surgery, Vol. 155, No. 3, March 1962, pp. 370-372.

Sponsor: Louisville and Jefferson County Heart Association, Kentucky.

Conference: Kentucky Surgical Society, May 1961, French Lick, Indiana.

JNG Laceration/Openwound/Penetrating, Injury/Trauma, Accident
OAKC Blood Vessels, Cardiovascular System, Anatomy/Body, Biomedical Aspect
JNP Consequences/Complications
YCK Case Studies, Nature of Study, Study-Report Type

Discussion focuses on four case reports. Penetrating injuries of subclavian vessels constitute immediate threat to life through exsanguinating hemorrhage and require immediate surgical exploration. If patient does survive initial injury, complications of secondary hemorrhage, false aneurysm and arteriovenous fistula may be equally serious. Deaths in two cases point up threat from embolization.

24-4044 S

LE LESIONI DELLA MILZA NEI TRAUMI CHIUSI ED APERTI DELL'ADDOME: CONSIDERAZIONI SU 91 CASI. [LESIONS OF THE SPLEEN IN CLOSED AND OPEN TRAUMAS OF THE ABDOMEN: Considerations on 91 cases.] See 15-4044 S

24-4045 S

CHEST TRAUMA WITH PNEUMOTHORAX AND HEMOTHORAX. See 13-4045 S

24-4050 S

Hauser, C. W./ Perry, J. F., Jr.
MASSIVE HEMORRHAGE FROM PELVIC FRACTURES.

St. Paul Ramsey County Hospital, Dept. of Surgery, Minneapolis, Minnesota/ Minnesota Univ. School of Medicine, Minneapolis. Feb. 1966. 6 p. tables. ref.

Minnesota Medicine, Vol. 49, Feb. 1966, pp. 285-290.

OADH Pelvis, Lower Extremity, Anatomy/Body, Biomedical Aspect
JNH Fracture, Injury/Trauma, Accident
JNK Hemorrhage
WSD Surgery, Medical, Methods
WSE Therapeutic

Clinical study of 196 patients. Significant hemorrhage from pelvic fracture found in 1/3 of patients. Authors recommend hypogastric artery ligation. Data statistics: age; sex; cause of injury; mortality; type of fracture and mortality; blood loss and mortality; associated injuries and mortality.

24-4125 S

EXPERIENCE WITH 472 CIVILIAN PENETRATING WOUNDS OF THE CHEST. See 13-4125 S

BIBLIOGRAPHY

- 24-4126 S
INJURIES OF THE LIVER: A review of 111 cases. See 15-4126 S
- 24-4134 S
THE INCIDENCE OF MORBID-ANATOMICAL EVIDENCE OF SHOCK-KIDNEY AND OTHER RENAL DISORDERS IN UNSELECTED AUTOPSY MATERIAL. See 21-4134 S
- 24-4146 S
PENETRATING WOUNDS OF THE ABDOMEN: Analysis of 776 operative cases. See 15-4146 S
- 24-4057 N
O'Connor, V. J./ O'Connor, V. J., Jr.
ACUTE RENAL FAILURE FOLLOWING EXTENSIVE TRAUMA.
Northwestern Univ., Chicago, Medical School, Dept. of Urology, Illinois/ Chicago Wesley Memorial Hospital, Illinois. June 1960. 4 p.
International College of Surgeons. Journal, Vol. 33, No. 6, June 1960, pp. 692-699.
Conference: International College of Surgeons, North American Federation, 24th annual congress, 13-17 Sept. 1959, Chicago, Illinois.
- JNX Multiple Severe Injuries, Injury/Trauma, Accident
JNP Consequences/Complications
OAMB Kidneys, Urogenital System, Anatomy/Body, Biomedical Aspect
WSE Therapeutic, Medical, Methods
- Authors describe etiology, clinical picture, and pathology. Discuss diagnosis and treatment with particular reference to pulmonary edema, potassium intoxication and the diuretic phase of management.
- 24-4084 S
THE SURGICAL MANAGEMENT OF 640 CONSECUTIVE LIVER INJURIES IN CIVILIAN PRACTICE. See 15-4084 S
- 24-4090 S
ARZTLICHE VERSORGUNG SCHWERVERLETZTER AM UNFALLORT UND AUF DEM TRANSPORT. [TREATMENT BY PHYSICIAN OF THE SEVERELY INJURED, AT THE SCENE OF THE ACCIDENT AND DURING TRANSPORTATION.] See 03-4090 S
- 24-4106 S
UNRECOGNIZED ABDOMINAL TRAUMA IN PATIENTS WITH HEAD INJURIES. See 15-4106 S
- 24-4111 N
Clowes, G. H. A., Jr.
METABOLIC RESPONSES TO INJURY. Part I: The production of energy.
South Carolina Medical College, Charleston. 1963. 7 p. tables, figs.
Journal of Trauma, Vol. 3, 1963, pp. 149-160.
- OBM Metabolism, Problems, Biomedical Aspect
JN Injury/Trauma, Accident
WSD Surgery, Medical, Methods
JNPL Shock, Consequences/Complications
OAMB Kidneys, Urogenital System, Anatomy/Body
- Extensive description of biochemical and physiological responses and discussion of therapeutic implications.
Part I. Author discusses the whole patient: the wound, body water electrolytes, energy production and cellular metabolism. Tabulates plasma electrolyte values following loss of blood in patients with and without shock.
- 24-4112 N
Clowes, G. H. A., Jr.
METABOLIC RESPONSES TO INJURY. Part II: Acid-base balance.
South Carolina Medical College, Charleston. 1963. 8 p. figs. ref. tables.
Journal of Trauma, Vol. 3, 1963, pp. 161-175.
- OBM Metabolism, Problems, Biomedical Aspect
JNPL Shock, Consequences/Complications, Injury/Trauma, Accident
YCK Case Studies, Nature of Study, Study-Report Type
YEG Tables/Graphs, Contents
OAL Respiratory System, Anatomy/Body
- Part II. Author discusses cause and treatment of metabolic acidosis with particular reference to the role of infection. Graphs and tabulates hemodynamic values, arterial blood chemistry for patients during and following surgery, with and without shock.
- 24-4119 S
FATAL TRAFFIC ACCIDENTS IN BRISBANE FROM 1935 TO 1964. See 21-4119 S
- 24-4156 S
Heyer, H. E.
A CLINICAL STUDY OF SHOCK OCCURRING DURING ACUTE MYOCARDIAL INFARCTION: An analysis of 58 cases.
Baylor Medical Center, Dept.'s of Internal Medicine, Dallas, Texas/ Texas Univ. Dallas, Southwestern Medical School. Oct. 1961. 6 p. charts. ref. tables.
American Heart Journal, Vol. 62, No. 4, Oct. 1961, pp. 436-446.
- JNPL Shock, Consequences/Complications, Injury/Trauma, Accident
OAKB Heart, Cardiovascular System, Anatomy/Body, Biomedical Aspect
YEF Data Statistics, Contents, Study-Report Type
NKFF Delay, Frequency/Time, Operating Conditions, Physical Aspect
WSE Therapeutic, Medical, Methods
- A survey of 714 cases of acute myocardial infarction revealed 58 with accompanying shock. Author discusses hypotension without shock and premonitory shock, classifies patients according to clinical features and responses to therapy, and summarizes the clinical features of surviving and fatal cases. Found that the mortality rate increased as the initiation of treatment was delayed. Data

statistics: (in total group) sex; mortality; incidence of shock; (in patients with shock) mortality by age group; type of onset of shock; mortality and time elapsed before treatment; mortality and congestive failure; results of digitalization. Gives 3 illustrative case reports.

24-4160 S

PENETRATING INJURIES TO THE CHEST: Clinical results in the management of 769 patients. See 13-4160 S

24-4195 S

Sako, Y./ Artz, C. P./ Howard, J. M./ Bronwell, A. W./ Inui, F. K.

A SURVEY OF EVACUATION, RESUSCITATION, AND MORTALITY IN A FORWARD SURGICAL HOSPITAL.

Army Medical Service Graduate School, Surgical Research Team in Korea. April. 1955. 5 p. tables. ref.

Surgery, Vol. 37, No. 4, April 1955, pp. 602-611.

WSBCR Resuscitation, Maintaining Airways, First Aid, Medical, Methods

JRH Transportation, Recovery of Injured, Accident

JNB Fatal, Injury/Trauma

NKFF Delay, Frequency/Time, Operating Conditions, Physical Aspect

WSD Surgery

VN Epidemiology/Etiology, Disciplines

YEF Data Statistics, Contents, Study-Report Type

Authors analyze data from a series covering Jan. 1952 to Aug. 1953 and a similar series from World War II. Conclude that in both wars one of the most important causative factors in death was body region struck. Note a lower overall case mortality rate in the Korean War group, attributed to the greater amounts of blood given. Data statistics: case mortality rates; type of wound; mode of evacuation; time intervals for phases of care; blood transfusions and time of transfusion; cause of death; major amputations; comparison with similar injuries in World War II.

24-4196 S

ABDOMINAL TRAUMA: A study of 297 consecutive cases. See 15-4196 S

24-4337 S

ROAD ACCIDENTS. See 03-4337 S

24-4501 S

Campbell, E./ Whitfield, R. D.

THE INCIDENCE AND SIGNIFICANCE OF SHOCK IN HEAD INJURY.

Albany Medical College, Dept. of Surgery, New York. Nov. 1953. 4 p. figs. tables. ref.

Annals of Surgery, Vol. 138, No. 5, Nov. 1953, pp. 698-705.

OAI Head, Anatomy/Body, Biomedical Aspect

JNPL Shock, Consequences/Complications, Injury/Trauma, Accident

JNK Hemorrhage

JNH Fracture

YEG Tables/Graphs, Contents, Study-Report Type

YEF Data Statistics

YCK Case Studies, Nature of Study

718 patients with acute head injuries. Authors conclude that shock is neither an essential nor a prominent feature of cerebral concussion. Suggest the possibility that in many acute brain injuries factors are set in motion which tend to overcome hypotension. Data statistics: mortality; type of head injury; associated injuries; incidence of shock. 2 illustrative case histories.

24-4504 S

DIED IN HOSPITAL: A three-year study of deaths following trauma. See 21-4504 S

24-4510 S

Udhoji, V. N./ Weil, M. H.

CIRCULATORY EFFECTS OF ANGIOTENSIN, LEVARTERENOL AND METARAMINOL IN THE TREATMENT OF SHOCK.

Southern California Univ. School of Medicine, Dept. of Medicine/ Southern California Univ., School of Medicine, Dept. of Surgery/ Southern California Univ. School of Medicine, Shock Research Unit/ Los Angeles County Hospital, California. 5 March 1964. 5 p. figs. ref. tables. *New England Journal of Medicine*, Vol. 270, No. 10, 5 March 1964, pp. 501-505.

Grant No: HE-5570.

Sponsor: John A. Hartford Foundation, Inc., New York/ National Heart Institute, Bethesda, Maryland.

Conference: American Federation of Clinical Research, General Session, 28 April 1963, Atlantic City, New Jersey.

JNPL Shock, Consequences/Complications, Injury/Trauma, Accident

WSE Therapeutic, Medical, Methods

WUP Physiological, Testing/Measures

Laboratory and clinical study of 12 patients. Authors found significantly lower cardiac output and urine flow and a disproportionate increase of peripheral vascular resistance when angiotensin was compared to the other drugs. Question rationale for use of angiotensin. Data statistics: heart rate, central venous pressure; arterial blood pressures; cardiac output; urine flow; peripheral vascular resistance. Brief description of laboratory methods and findings.

24-4513 S

Salem, G./ Strahberger, E.

ÜBER DIE RIPPENSERIENFRAKTUREN DURCH VERKEHRSUNFÄLLE UND DEN DERZEITIGEN STAND IHRER BEHANDLUNG. [ON SERIAL RIB FRACTURES CAUSED BY TRAFFIC ACCIDENTS AND THE CURRENT STATUS OF THEIR TREATMENT].

Vienna Univ., Surgery Dept. (Austria). March 1964. 10 p. ref. figs.

Klinische Medizin, Vol. 19, March 1964, pp. 85-99.

JNH Fracture, Injury/Trauma, Accident

OAFD Ribs, Thorax, Anatomy/Body, Biomedical Aspect

JNPI Fat Embolism, Consequences/Complications

OAL Respiratory System

OAE Abdomen

JNP Consequences/Complications

YEF Data Statistics, Contents, Study-Report Type

BIBLIOGRAPHY

168 cases reported (1955-61). 37 fatals discussed, causes of death listed. High incidence of fat embolism and exsanguination (heart and liver).

Authors discuss therapy, complications, and injuries of abdominal organs.

24-4516 N

Del Guercio, L. R. M.

SHOCK AND PULMONARY EMBOLISM.

1965. 8 p. tables. figs. ref.

Clinical Anesthesia, Vol. 2, Chapter 11, 1965, pp. 167-181.

JNPO Occlusion/Thrombosis/Clot, Injury/Trauma, Accident

JNPL Shock

WUP Physiological, Testing/Measures, Methods

YER General Discussions, Contents, Study-Report Type

OALE Lungs, Respiratory System, Anatomy/Body, Biomedical Aspect

Author discusses incidence, diagnosis, and management of shock due to pulmonary embolism in hospital patient. Concludes that successful treatment requires the solution of problems in hospital logistics.

24-4523 N

BEITRAG ZUR SCHOCKBEKÄMPFUNG AUF DER AUTOBAHN. [CONTRIBUTION TO THE THERAPY OF SHOCK ON THE HIGHWAY.] See 02-4523 N

25-3703 S

Kuhne, H./ Kremser, K. H.

DIE KLINISCHE BEDEUTUNG DER TRAUMATISCHEN FATTEMBOLIE. [THE CLINICAL SIGNIFICANCE OF TRAUMATIC FAT EMBOLISM.]

Chirurgischen Universitätsklinik Frankfurt (Germany). Dec. 1957. 6 p. ref. tables.

Bruns Beitrage zur Klinischen Chirurgie, Vol. 195, No. 4, Dec. 1957, pp. 385-394.

YEF Data Statistics, Contents, Study-Report Type

JNPI Fat Embolism, Consequences, Injury/Trauma, Accident

WSI Autopsy, Medical, Methods

JNH Fracture

According to 643 autopsy records, of the 95% of traffic fatalities with signs of fat embolism in the lungs, 59% have massive fat in lungs and 23% involve the large circulatory system. Of 55,122 hospital admissions over 10 years, 2,956 had fractures and 115 died from the consequences of their injuries. Autopsies of all of these showed fat embolism in lung; only seven were so diagnosed while alive. In 18 cases, fat embolism was the sole cause of death.

25-3705 S

Fitts, W. T., Jr./ Lehr, H. B./ Bitner, R. L./ Spelman, J. W. AN ANALYSIS OF 950 FATAL INJURIES.

Pennsylvania Univ. Schools of Medicine/ Pennsylvania Univ. Hospital/ Philadelphia Dept. of Public Health, Office of the Medical Examiner, Pennsylvania. 1964. 4 p. tables.

Surgery, Vol. 56, No. 4, Oct. 1964, pp. 663-668.

JN Injury/Trauma, Accident

WSI Autopsy, Medical, Methods

YEF Data Statistics, Contents, Study-Report Type

EEC Old Aged, Adults, People

JNH Fracture

OADH Pelvis, Lower Extremity, Anatomy/Body, Biomedical Aspects

JNX Multiple Severe Injuries

OAI Head

Analysis of cause of death in all 950 cases involving fatal injury in Philadelphia during 1961. Data from all 41 of city's hospitals. Mean age of group was 65 years. 5% of injuries involved occupants of motor vehicles. Describes vehicles, first-aid equipment, and communication system of police and fire department. 74% of injured were transported to hospital by police vehicles; 5% by fire department vehicles. Average of fifteen minutes between report of injury and patient's arrival at hospital. Whether complete autopsy was conducted made significant difference in the primary cause of death assigned. Case reports included. Errors in diagnosis, management, or both contributing to 51 deaths are described.

25-3713 S

EINE ANALYSE VON 827 UNFALLTODESFÄLLEN. [AN ANALYSIS OF 827 CASES OF FATAL ACCIDENTS.] See 24-3713 S

25-3715 S

MÖGLICHKEITEN EINER INTENSIVIERUNG DER ERSTEN HILFE FÜR UNFALLVERLETZTE IN STÄDTEN MIT LÄNDLICHER UMGEBUNG. [POSSIBILITIES FOR INTENSIFYING FIRST AID FOR ACCIDENTS IN CITIES WITH A RURAL ENVIRONMENT.] See 03-3715 S

25-3721 S

Greendyke, R. M.

FAT EMBOLISM IN FATAL AUTOMOBILE ACCIDENTS.

April 1964. 5 p. ref. tables. figs.

Journal of Forensic Sciences, Vol. 9, No. 2, April 1964, pp. 201-208.

JNPI Fat Embolism, Consequences, Injury/Trauma, Accident

JNH Fracture

WSI Autopsy, Medical, Methods

YEF Data Statistics, Contents, Study-Report Type

JNB Fatal

L Time

Of the 112 victims studied, average age was 65; 50 control cases where death had not resulted from automobile accidents were also examined. Clinical data from hospitals were obtained. Findings indicate absence of pulmonary fat embolism in six patients without skeletal fracture, absence or minor embolism in 57 patients dead upon arrival of physician, and pulmonary embolism in 42 of the 49 patients alive upon admission to hospital. Of these 42, nine had fat embolism as primary cause of death. Table shows etiology, survival time, clinical impression of cause of death, fracture sites, and severity of embolism for these nine cases.

25-3722 S

Emson, H. E.
FAT EMBOLISM STUDIED IN 100 PATIENTS DYING AFTER INJURY.
Birmingham Accident Hospital, Pathology Dept. (England). Jan. 1958. 4 p. fig. tables. ref.
Journal of Clinical Pathology, Vol. 11, Jan. 1958, pp. 28-35.

JNPI Fat Embolism, Consequences, Injury/Trauma, Accident
L Time
JNH Fracture
OALE Lungs, Respiratory System, Anatomy/Body, Biomedical Aspect
YEG Tables, Contents, Study-Report Type

100 patients who died after injury are compared to control group who died from burns (43 cases) or nontraumatic illnesses (10 cases). Both pulmonary and systemic fat embolism were absent or insignificant in almost all control cases. In the trauma series, 89% showed pulmonary fat embolism which increased according to severity of trauma; 24% showed systemic fat embolism. Pulmonary fat embolism is not thought to be important as cause of illness or death and is an almost constant accompaniment of fractures. Systemic fat embolism was never found in the absence of pulmonary fat embolism. Cerebral fat embolism is important as a cause of symptoms and death.

25-3724 S

Dencker, H.
MORTALITY RELATED TO VARIOUS METHODS OF TREATMENT OF FEMORAL SHAFT FRACTURES.
Göteborg Univ., Dept. of Surgery, Göteborg (Sweden). Nov. 1965. 5 p. ref. figs.
Acta Chirurgica Scandinavica, Vol. 130, Nov. 1965, pp. 449-457.

JNH Fracture, Injury/Trauma, Accident-
OADEB Femur, Leg, Lower Extremity, Anatomy/Body, Biomedical Aspect
WSE Therapeutic
JNPI Fat Embolism, Consequences
YEF Data Statistics, Contents, Study-Report Type

Author reviews state-of-the-art, 1,003 fractures of femoral shaft in 992 patients in Sweden 1952-1954. Shows causes of death in various methods of treatment and discusses possible prevention of some fatalities. Overall mortality rate was unusually high. Due to limited number of deaths in each group, no statistical validity could be established for conclusions. Case reports are given.

25-3730 N

Evarts, C. M.
DIAGNOSIS AND TREATMENT OF FAT EMBOLISM.
Cleveland Clinic Foundation, Ohio. 1965. 3 p. tables. figs.
American Medical Association. Journal, Vol. 194, No. 8, 22 Nov. 1965, pp. 157-159.
Conference: American Medical Association, 114th annual, 23 June 1965, New York.

WSC Diagnosis, Medical, Methods
JRGI Professional/Physician, Treatment/Care, Recovery of Injured, Accident

JNPI Fat Embolism, Consequences, Injury/Trauma
YCC State-of-the-Art, Nature of Study, Study-Report Type

Details are given for diagnosis of fat embolism, especially in regard to distinguishing it from cranio-cerebral trauma. Fat embolism most frequently accompanies long-bone and hip fractures. General and specific measures for treatment, such as the use of heparin and dextran 40, are described.

25-3737 S

BERICHT ÜBER 5900 SCHÄDEL-HIRN-TRAUMEN. [REPORT ON 5900 CRANIOCEREBRAL TRAUMAS.]
See 22-3737 S

25-3748 S

MÖGLICHKEITEN UND GRENZEN ÄRZTLICHER HILFELEISTUNGEN AM UNFALLORT. [POSSIBILITIES AND LIMITATIONS OF MEDICAL ASSISTANCE AT THE SCENE OF A DISASTER.] See 02-3748 S

25-3755 N

TRAUMATISCHER UND POSTOPERATIVER SCHOCK. [TRAUMATIC AND POSTOPERATIVE SHOCK.] See 24-3755 N

25-3756 N

Orlowski, T./ Tomza, J.
ZUR BEHANDLUNG DER FETTEMBOLIE. [ON THE TREATMENT OF FAT EMBOLISM.]
Chirurgischen Abteilung des Bezirkskrankenhauses Wroclaw (Germany). Sept. 1963. 3 p. ref.
Medizinische Monatsschrift, Vol. 17, Sept. 1963, pp. 583-585.

JNPI Fat Embolism, Consequences, Injury/Trauma, Accident
WSE Therapeutic, Medical, Methods
VN Epidemiology, Disciplines
YCC State-of-the-Art, Nature of Study, Study-Report Type

State-of-the-art report, with one case report of a patient with fat embolism in the brain in very serious condition with full recovery after I.V. therapy with Lipostabil. Use of Lipostabil is recommended in all types of trauma.

25-3759 N

Kessler, M./ Leibe, H./ Kamrad, F.
ERFAHRUNGEN MIT DEM PRÄPARAT "LIPOSTABIL" BEI DER BEHANDLUNG DER FETTEMBOLIE. [EXPERIENCES WITH THE PREPARATION "LIPOSTABIL" IN THE TREATMENT OF FAT EMBOLISM.]
6 Feb. 1965. 3 p. figs.
Zentralblatt für Chirurgie, Vol. 90, 6 Feb. 1965, pp. 206-210.

JNPI Fat Embolism, Consequences, Injury/Trauma, Accident
WSE Therapeutic, Medical, Methods
YCC Case Studies, Contents, Study-Report Type

BIBLIOGRAPHY

Brief state-of-the-art report, with one case report on severe fat embolism. A significant improvement of the patient's condition was achieved after therapy with Lipostabil subsequent to negative response to conventional treatment. Authors refer to favorable results published by other researchers.

25-3773 S

Wertzberger, J. J.

FAT EMBOLISM: An analysis of cases seen at University of Kansas Medical Center from 1951 to 1962.

Kansas Univ. School of Medicine, Kansas City. Dec. 1964. 7 p. figs.

Kansas Medical Society. Journal, Vol. 65, Dec. 1964, pp. 591-597.

JNPI Fat Embolism, Consequences, Injury/Trauma, Accident
WSC Diagnosis, Medical, Methods
WSI Autopsy
YEF Data Statistics, Contents, Study-Report Type
YCK Case Studies, Nature of Study

Reports on 52 cases, 49 diagnosed at autopsy, with 4 case reports. Describes clinical manifestations and criteria for pathologist's diagnosis of fat embolism, discussing problem of differential diagnosis. Stresses importance of laboratory tests such as chest X rays, EKG, and search for fat droplets in urine. Describes preventive measures and supportive care for established cases. Review of literature.

25-3775 N

Teare, R. D./ Bowen, D. A. L./ Drury, R. A. B.

ACUTE PEPTIC ULCERATION AND CEREBRAL FAT EMBOLISM AFTER FRACTURE.

St. George's Hospital, Dept. of Forensic Medicine, London (England)/ Central Middlesex Hospital, Dept. of Morbid Anatomy and Histology, London (England). Nov. 1962. 2 p. ref.

Journal of Bone and Joint Surgery, Vol. 44B, No. 4, Nov. 1962, pp. 790-793.

OANBB Brain, Central, Nervous System, Anatomy/ Body, Biomedical Aspect
JNPI Fat Embolism, Consequences, Injury/Trauma, Accident
JNH Fracture
YCK Case Studies, Nature of Study, Study-Report Type

Report on three cases where cerebral fat embolism following skeletal injuries led to fatal peptic ulceration. Describe possible pathogenesis as discussed in literature.

25-3784 N

THE MANAGEMENT OF HEAD INJURIES COMPLICATED BY MAJOR EXTRACRANIAL TRAUMA. See 11-3784 N

25-3786 S

Adler, F./ Peltier, L. F.

THE EFFECT OF SUBLINGUAL POTASSIUM HEPARIN (CLARIN) ON THE SERUM LIPASE ACTIVITY OF PATIENTS FOLLOWING FRACTURES.

Kansas Univ. Medical Center, James B. Weaver Laboratory for Orthopedic Research, Kansas City. May 1964. 2 p. fig. ref.

Journal of Trauma, Vol. 4, May 1964, pp. 390-393.

Grant No: HE-03592-07.

Sponsor: Public Health Service.

Conference: American Association for the Surgery of Trauma, 23rd annual, 24-26 Oct. 1963, San Francisco, California.

JNPI Fat Embolism, Consequences, Injury/Trauma, Accident
YEF Data Statistics, Contents, Study-Report Type
WSE Therapeutic, Medical, Methods
YCH Field Experiment, Nature of Study

Serum lipase level is a reliable aid in the diagnosis and prognosis of the chemical phase of fat embolism. Authors compared serum lipase level for seven days in two groups of patients with extracapsular fractures of the hip. Sixteen of the 21 patients receiving heparin had an early significant elevation of the serum lipase activity. Fourteen of the 26 who did not receive heparin had a delayed significant lipase elevation. In 11 healthy subjects, no rise in lipase activity was noted after heparin administration. Heparin was administered sublingually in order to test its lipolytic rather than anticoagulant properties.

25-3787 S

Morton, K. S./ Gurjar, M. P.

HEMORRHAGIC SHOCK AND FAT EMBOLISM: A clinical and experimental study.

British Columbia Univ., Trauma Research Unit, Vancouver. Sept. 1964. 3 p. tables. ref.

Journal of Trauma, Vol. 4, Sept. 1964, pp. 687-691.

Grant No: 9360-04.

Sponsor: Canadian Dept. of National Defense, Defense Research Board.

JNPI Fat Embolism, Consequences, Injury/Trauma, Accident
JNPL Shock
YCG Laboratory Experiment, Nature of Study, Study-Report Type
YEF Data Statistics, Contents
YCH Field Experiment

A review of 22 clinical cases revealed a clinically recognizable fat-embolism syndrome. Appearance of syndrome could not be related to prolonged hypotension or a need for massive transfusion. Authors conclude from experimental study with rats that the clinical syndrome and experimental pulmonary fat embolism are unrelated to hypovolemic hypotension.

25-3791 S

Lowenfels, A. B./ Barbieri, R./ Hartmen, R./ Lord, J. W., Jr.

EXPERIMENTAL ARTERIAL FAT EMBOLISM.

New York Univ. School of Medicine, Dept. of Surgery, New York/ White Plains Hospital, White Plains, New York. Sept. 1963. 5 p. ref. tables.

Journal of Trauma, Vol. 3, Sept. 1963, pp. 399-406.

Grant No: H-5114(C1).

Sponsor: Public Health Service.

Conference: American Association for the Surgery of Trauma, 22nd annual, 29-31 Oct. 1962, Hot Springs, Virginia.

JNPI Fat Embolism, Consequences, Injury/Trauma, Accident

YCG Laboratory Experiment, Nature of Study,
Study-Report Type
YEF Data Statistics, Contents

Project was designed to test effects of 5- to 50-micron droplets of neutral fat injected into arterial system of dogs. Lethal amount by intra-arterial route is about one-tenth that by intravenous injection. When administered intravenously for a one-hour period immediately after fat injection, heparin offered no significant protection.

25-3927 N

Cole, W. R.
TRAUMATIC PULMONARY FAT EMBOLISM.
1965. 3 p. tables. figs. ref.
Journal of College Radiology of Australia, Vol. 9, 1965,
pp. 228-233.

JNPI Fat Embolism, Consequences, Injury/Trauma,
Accident
YCC State-of-the-Art, Nature of Study, Study-
Report Type
YCK Case Studies

Short literature review with four case reports. Discusses the Peltier theory of chemical phase of fat embolism, which seems to contraindicate the use of heparin.

25-3946 S

Szabo, G./ Serenyi, P./ Kocsar, L.
FAT EMBOLISM: Fat absorption from the site of injury.
National Institute of Traumatology, Budapest (Hungary).
Nov. 1963. 3 p. figs. tables. ref.
Surgery, Vol. 54, No. 5, Nov. 1963, pp. 756-760.

JNPI Fat Embolism, Consequences/Complications,
Injury/Trauma, Accident
JNH Fracture
YCG Laboratory Experiment, Nature of Study,
Study-Report Type
L Time

¹³¹I-labeled triolein was injected into one hind extremity of one group of dogs with and another without fracture of the femur. Resorption of fat from injection site proved to be extremely slow. Absorption rate was not influenced by bone fracture. Fat is not transported by lymphatic system.

25-3958 N

SCHOCKBEGRIFF IM WANDEL DER ZEITEN UND HEUTE. [CONCEPT OF SHOCK IN THE PAST AND TODAY.] See 24-3958 N

25-3971 S

Falzi, G./ Henn, R./ Spann, W.
ÜBER PULMONALE FETTEMBOLE NACH TRAUMEN MIT VERSCHIEDEN LANGER ÜBERLEBENSZEIT. [ON PULMONARY FAT EMBOLISM AFTER INJURIES WITH DIFFERENT PERIODS OF SURVIVAL.]
Universität München, Institut für Gerichtliche Medizin und Versicherungsmedizin (Germany). 22 May 1964. 4 p. tables. graphs. ref.

Muenchener Medizinische Wochenschrift, Vol. 106, 22
May 1964, pp. 978-981.

JNPI Fat Embolism, Consequences/Complications,
Injury/Trauma, Accident
OALE Lungs, Respiratory System, Anatomy/Body,
Biomedical Aspect
NKFP Period, Frequency/Time, Operating Conditions,
Physical Aspect
YEF Data Statistics, Contents, Study-Report Type
VN Epidemiology/Etiology, Disciplines

The author reports on the results of histological studies of 201 lungs of patients who died posttraumatically, which were carried out to determine the incidence of pulmonary fat-embolism. The occurrence of pulmonary fat-embolism depends primarily on the survival time and secondarily on the severity of the injury. Frequency of occurrence by age and sex is shown (63% of cases had no fat emboli in the lungs, a condition related to the fact that 57% of cases were accident cases where death occurred almost immediately). Another table shows survival time, with and without fat-embolism in each age category. In no case was fat-embolism found to be the cause of death (condition for accepting fat-embolism as cause of death was that at least one-third to one-half of all capillary vessels were blocked).

25-3976 S

DER TÖDLICHE VERKEHRSUNFALL AUS DER SICHT DES PATHOLOGEN. [THE FATAL TRAFFIC ACCIDENT FROM THE PATHOLOGIST'S VIEW-POINT.] See 23-3976 S

25-4025 N

Bergentz, S. E.
STUDIES ON THE GENESIS OF POSTTRAUMATIC FAT EMBOLISM.
Goteborg Univ. (Sweden). 1961. 72 p. ref. figs. tables.
Acta Chirurgica Scandinavica. Supplement, Vol. 282,
1961, pp. 1-72.

YER General Discussions, Contents, Study-Report
Type
JNPI Fat Embolism, Consequences/Complications,
Injury/Trauma, Accident
YCG Laboratory Experiment, Nature of Study

Experimental study with dogs, rabbits and hamsters. Extensive review of the literature. Author studied: occurrence of pulmonary fat emboli after injury; occurrence of fat droplets in the blood after injury; influence of hyperlipemia on post-traumatic fat embolism; influence of injury on the lipids in blood and lung tissue; microcirculatory flow changes in the immediate post-traumatic period; effects of injury on the coagulation factors; formation of fat droplets and fat emboli from changes in the physical state of blood. Concludes that injury induces such changes in the physical state of the blood that fat droplets are formed from the blood fat. Suggests that clinical symptoms are primarily caused not by fat emboli, but by an impaired flow due to red cell aggregation.

25-4049 N

Gonski, A.
TREATMENT OF FAT EMBOLISM COMPLICATING FRACTURES.

BIBLIOGRAPHY

Prince Henry Hospital, Sydney (Australia)/ Prince of Wales Hospital, Sydney (Australia). 13 July 1963. 3 p. ref.
Medical Journal of Australia, Vol. 2, 13 July 1963, pp. 44-46.

JNPI Fat Embolism, Consequences/Complications, Injury/Trauma, Accident
WSE Therapeutic, Medical, Methods
YCK Case Studies, Nature of Study, Study-Report Type

Author reports five consecutive cases successfully treated with alcohol given intravenously. Discusses incidence, clinical picture, diagnosis and management.

25-4062 N

Kaulbach, W.
HERZSCHÄDIGUNG BEI FETTEMBOLIE. [HEART DAMAGE IN FAT EMBOLISM].
Heidelberg Univ., Chirurgischen Klinik (Germany). 1960. 6 p. figs. ref.
Langenbacks Archiv fuer Klinische Chirurgie, Vol. 293, 1960, pp. 781-791.

JN Injury/Trauma, Accident
JNPI Fat Embolism, Consequences/Complications
OAKB Heart, Cardiovascular System, Anatomy/Body, Biomedical Aspect
WSC Diagnosis, Medical, Methods

Four cases of fat embolism and their effects on EKG are discussed. EKG's at various intervals after trauma demonstrate overload of right heart. Pericarditis associated in one case. Author recommends EKG as diagnostic aid for fat embolism.

25-4094 N

Henzel, J. H./ Smith, J. L./ Pories, W. J./ Burget, D. E.
FAT EMBOLISM: Diagnostic challenge of a potentially lethal clinical entity.
Air Force Hospital Wright-Patterson, Dept. of Surgery, Wright-Patterson AFB, Ohio. April 1967. 5 p. ref.
American Journal of Surgery, Vol. 113, April 1967. pp. 525-532.

WSC Diagnosis, Medical, Methods
JNPI Fat Embolism, Consequences/Complications, Injury/Trauma, Accident
JNP Consequences/Complications
WSE Therapeutic
YCK Case Studies, Nature of Study, Study-Report Type

Gives case report and brief historical background on knowledge of fat embolism, describing symptoms and treatment. Complications are controlled by such measures as sedation, tracheal suction, and maintenance of normothermia. Heparin and ethyl alcohol should help decrease sequilae of capillary plugging and release of toxic fatty acids.

25-4119 S

FATAL TRAFFIC ACCIDENTS IN BRISBANE FROM 1935 TO 1964. See 21-4119 S

25-4153 N

LeQuire, V. S./ Shapiro, J. L./ LeQuire, C. B./ Cobb, C. A., Jr./ Fleet, W. F., Jr.

A STUDY OF THE PATHOGENESIS OF FAT EMBOLISM BASED ON HUMAN NECROPSY MATERIAL AND ANIMAL EXPERIMENTS.

Vanderbilt Univ., School of Medicine, Dept. of Anatomy, Nashville, Tennessee/ Vanderbilt Univ., School of Medicine, Dept. of Pathology, Nashville, Tennessee/ Vanderbilt Univ., School of Medicine, Dept. of Surgery, Nashville, Tennessee. Sept.-Oct. 1959. 9 p. illus. ref. tables.

American Journal of Pathology, Vol. 35, No. 5, Sept.-Oct. 1959, pp. 999-1015.

Grant No: PHS 1570/ Senior Research Fellowship SF 54. Sponsor: Public Health Service/ Middle Tennessee Heart Association/ Eli Lilly Foundation, Indiana.

WSI Autopsy/Pathology, Medical, Methods
JNPI Fat Embolism, Consequences/Complications, Injury/Trauma, Accident
VN Epidemiology/Etiology, Disciplines
YCG Laboratory Experiment, Nature of Study, Study-Report Type

Authors describe and present results of histochemical tests on autopsy material and decompression experiments with rabbits. Propose that pulmonary fat emboli may result from traumatized depots, and that tissue injury initiates a process of colloidal instability of plasma lipids and increase of plasma lipids followed by aggregation and localization by the pulmonary vasculature.

25-4168 S

Henn, R. H. E./ Spann, W.
UNTERSUCHUNGEN IBER DIE HÄUFIGKEIT DER CEREBRALEN FETTEMBOLIE NACH TRAUMA MIT VERSCHIEDEN LANGER ÜBERLEBENSZEIT. [STUDIES ON THE FREQUENCY OF CEREBRAL FAT EMBOLISMS FOLLOWING INJURY WITH VARIOUSLY LONG SURVIVAL TIME].

Dec. 1965. 6 p. charts. ref.
Monatsschrift fur Unfallheilkunde, Vol. 68, Dec. 1965, pp. 513-522.

NKF Frequency/Time, Operating Conditions, Physical Aspect
JNPI Fat Embolism, Consequences/Complications, Injury/Trauma, Accident
OANBB Brain, Central, Nervous System, Anatomy/Body, Biomedical Aspect
NKFF Delay
YEF Data Statistics, Contents, Study-Report Type

Author discusses cerebral fat embolism as cause of death. Brief literature review is made pointing out sample size and frequency of fat embolism in each article. Author's own material obtained from 140 autopsies (trauma cases only) examined for fat embolism in the brain, of which 86 also had the lungs examined for fat deposits. Method and criteria are described. Age distribution and survival time are plotted. Number and severity of cerebral fat embolism are plotted as a function of survival time, and compared to same data for pulmonary fat embolism. Frequency of injury to heart, major vessels, and other vital organs, is correlated to fat embolism in brain and lungs. Frequency of brain purpura is given as a function of the survival time. Frequency of cerebral fat embolism by age is given. Brain purpura and clinical

symptoms not always sufficient to diagnose cerebral fat embolism.

25-4534 S

Camurati, C./ Pelliccioni, S.
LA CAUSA DI MORTE NEI TRAUMATIZZATI: Studio clinico-statistico ed anatomico-patologico. [CAUSE OF DEATH IN TRAUMATIZED PATIENTS: Clinico-statistical and anatomico-pathologic study].
1964. 24 p. bib. tables, graphs.
Archivio di Ortopedia, Vol. 77, 1964, pp. 331-354.

JN Injury/Trauma, Accident
JNPH Pneumonia, Consequences/Complications
JNPI Fat Embolism
JNH Fracture
YEF Data Statistics, Contents, Program-Report Type
JNP Consequences/Complications

Analysis made of 171 fatalities. Causes of death discussed and frequencies given for major types of injury. Particular attention given to high incidence of fat embolism resulting from fractures. Causes of death discussed as a function of age. Therapy and clinical observations covered.

25-4337 S

ROAD ACCIDENTS. See 03-4337 S

25-4513 S

ÜBER DIE RIPPENSERIENFRAKTUREN DURCH VERKEHRSUNFÄLLE UND DEN DERZEITIGEN STAND IHRER BEHANDLUNG. [ON SERIAL RIB FRACTURES CAUSED BY TRAFFIC ACCIDENTS AND THE CURRENT STATUS OF THEIR TREATMENT.] See 24-4513 S

31-2631 N

TRAFFIC ACCIDENTS MEDICAL BIBLIOGRAPHY, 1955-1964.
Traffic Injury Research Foundation of Canada, Ottawa. Sept. 1965. 137 p.

DE Motor Vehicles, Vehicle
J Accident
VM Biomedical Sciences, Disciplines
YEC Bibliography, Contents, Study-Report Type

Contains 16 chapters on various subjects related to medical aspects of traffic safety, including alcohol and traffic accidents, medical assessment and driver licensure. Three chapters contain citations dealing specifically with motor vehicle accident trauma, and the post-injury phase of the accident. II. Statistical Papers; XI. Emergency Care, First Aid and Ambulance Services; XII. Medical and Surgical Problems of Traffic Accidents.

31-3831 N

Waters, W. R.
A REVIEW OF THE LITERATURE ON BURNS AND TRAUMA, SEPTEMBER 1964 TO AUGUST 1965.
Winnipeg Clinic, Dept. of Plastic Surgery, Winnipeg, Manitoba/ Manitoba Univ., Dept. of Surgery (Canada). Feb. 1966, 22 p. biblio.

Medical Services Journal, Canada, Vol. 22, Feb. 1966, pp. 99-141.

JN Injury/Trauma, Accident
YCC State-of-the-Art, Nature of Study, Study-Report Type
YEE Review, Contents
JKD Fire, Accident Hazards
JNPL Shock, Consequences
OAI Head, Anatomy/Body, Biomedical Aspect
OAH Neck
OAF Thorax
OAE Abdomen

601 articles discussed. Refer to 31-3910 N.

31-3877 N

Kernahan, D. A.
A REVIEW OF THE LITERATURE ON BURNS AND TRAUMA, SEPTEMBER 1963 TO AUGUST 1964.
Manitoba Univ., Dept. of Surgery (Canada). Feb. 1965. 18 p. biblio.
Medical Services Journal, Canada, Vol. 21, Feb. 1965, pp. 117-150.

YCC State-of-the-Art, Nature of Study, Study-Report Type
YEC Bibliography, Contents
JKD Fire, Accident Hazards, Accident
JN Injury/Trauma
YEE Reviews

426 articles discussed. Refer to 31-3910 N.

31-3910 N

Kernahan, D. A.
A REVIEW OF THE LITERATURE ON BURNS AND TRAUMA SEPTEMBER 1962 TO AUGUST 1963.
Manitoba Univ., Dept. of Surgery (Canada). April 1964. 19 p. biblio.
Medical Services Journal, Canada, Vol. 20, April 1964, pp. 315-351.

YCC State-of-the-Art, Nature of Study, Study-Report Type
YEC Bibliography, Contents
JN Injury/Trauma, Accident
JKD Fire, Accident Hazards
OAE Abdomen, Anatomy/Body, Biomedical Aspect
OAF Thorax
OAH Neck
OAI Head
WSE Therapeutic, Medical, Methods

Bibliography of 528 articles compiled for topics of burns, radiation, tetanus and gas gangrene, shock, emergency rooms and mass casualties, trauma, and fractures. Text contains comments, some purely descriptive and some with writer's evaluation, upon many of collected articles. Descriptions of literature dealing with emergency rooms and automobile trauma are extremely brief.

31-4337 S

ROAD ACCIDENTS. See 03-4337 S

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EMERGENCY MEDICAL SUBJECT CODE LIST

D VEHICLE

DB Nonpowered
 DBB Bicycles
 DC Animal Driven
 DD Power Vehicle
 DDB Rail
 DDC Airborne
 DDCB Airplanes
 DDCD Helicopters
 DE Motor Vehicles
 DEB Motor Cycles
 DEC Passenger
 DED Buses
 DEE Taxicabs
 DEF Cargo
 DEFB Trucks
 DEFC Truck Trailers
 DEFD Truck Tractors
 DEG Multipurpose
 DEH Special Purpose
 DEHL Ambulance
 DEHM Medical Unit
 DM Auxiliaries/ Accessories
 DMD Restraint Systems
 DMDB Seat Belts
 DMDC Shoulder Harnesses
 DMK Personal Equipment
 DMKB Helmets

E PEOPLE

EA Age
 EAB Driving Age
 EC Children
 ECB Infants
 ECC Preadolescents
 ED Adolescents
 EE Adults
 EEB Middle Aged
 EEC Old Aged
 EF Sex
 EFB Males
 EFC Females
 EFCP Pregnant
 EJ Occupations
 EK Race
 EL National Origins
 EM Pedestrians
 EN Passengers
 EO Drivers

F SOCIETY

FC Communities
 FD Corporate Bodies
 FDB Industrial
 FDC Business
 FDD Foundations/ Societies
 FDE Service Organizations
 FDF Schools
 FDG Safety Centers
 FG Governments
 FH Legislatures
 FI Executive Branches
 FJ Judiciary Branches/ Courts
 FK Mass Media/ Communications

J ACCIDENT

JA Preventive Measures
 JAF Spot Improvements
 JB Running-off-Road
 JC Noncollision on Road
 JCB Overturning
 JCC Falling from moving vehicle
 JD Collision
 JE Single Vehicle
 JF Multiple Vehicle
 JK Accident Hazards
 JKB Ejection
 JKC Flying Objects
 JKD Fire
 JKE Submersion
 JKF Explosion
 JKG Electrocutation
 JL Accident-Investigation
 JLK Accident Causation
 JLR Accident-Records
 JM Property Damage
 JMD Debris Removal
 JME Repairs
 JN Injury/ Trauma
 JNB Fatal
 JNC Internal
 JND Superficial
 JNE Contusion/ Crushing/ Blunt
 JNF Concussion
 JNG Laceration/ Openwound/
 Penetrating
 JNH Fracture
 JNI Dislocation
 JNJ Sprain/ Strain
 JNK Hemorrhage
 JNL Poison
 JNM Burns/ Scalds
 JNN Asphyxia/ Suffocation
 JNO Dismemberment/ Decapitation
 JNP Consequences/ Complications
 JNPF Fatal
 JNPG Late Effects
 JNPH Pneumonia
 JNPI Fat Embolism
 JNPJ Aspiration/ Dehydration
 JNPK Blood Loss/ Bleeding
 JNPL Shock
 JNPM Anoxia/ Hypoxia
 JNPO Occlusion/ Thrombosis/ Clot
 JNPQ Coma
 JNW Whiplash
 JNX Multiple Severe Injuries
 JR Recovery of Injured
 JRD Detection
 JRE Communication
 JRED Alert/ Alarm
 JREE Location (Search)
 JREF Decision (Interagency)
 JRF Extraction of Occupant
 JRG Treatment/ Care
 (See also Medical Methods, WS)
 JRGF First Aid (Red Cross)
 JRGH Advanced (Red Cross)
 JRGH Comprehensive
 JRGI Professional/ Physician
 JRH Transportation
 (See also Special Purpose
 Vehicles, DEH)
 JRHC Transportability
 JRHD Dead at Scene
 JRI Hospital Admission
 JRID Dead on Arrival
 JRJ Hospital Care
 JRJD Dead After Arrival
 JRJE Emergency Room
 JRJF Rehabilitation

O BIOMEDICAL ASPECT

OA Anatomy/ Body
 OAB Cell
 OAC Tissue
 OAD Lower Extremity
 OADA Ankle
 OADB Foot
 OADC Toe
 OADD Heel
 OADE Leg
 OADEB Femur
 OADEC Fibula
 OADED Tibia
 OADF Knee
 OADG Thigh
 OADH Pelvis
 OADHB Buttocks
 OADHC Hips
 OADHD Perineum/ Anus
 OAE Abdomen
 OAEB Inguinal Canal
 OAEC Iliac
 OAED Hypogastric
 OAEF Umbilical
 OAEF Lumbar
 OAEG Epigastric
 OAEH Hypochondriac
 OAF Thorax
 OAFB Breasts
 OAFD Ribs
 OAG Upper Extremity
 OAGB Shoulder
 OAGC Axilla
 OAGD Arm
 OAGDB Elbow
 OAGDC Humerus
 OAGDD Forearm
 OAGDDB Radius
 OAGDDC Ulna
 OAGDE Wrist
 OAGDF Hand
 OAGDG Finger/ Thumb
 OAGDH Metacarpals
 OAH Neck
 OAHB Throat
 OAHC Bronchial Region
 OAH D Hyoid
 OAI Head
 OAIA Skull
 OAIB Face
 OAIC Scalp
 OAIE Maxilla
 OAIF Eye
 OAIFB Eyebrow
 OAIFC Eyelashes
 OAIFD Eyelid
 OAIG Ear
 OAJ Digestive System/
 Alimentary Tract
 OAJB Mouth
 OAJBB Lips
 OAJBF Jaw/ Chin
 OAJC Tooth
 OAJE Tongue
 OAJI Esophagus
 OAJJ Stomach
 OAJJB Gastric Glands
 OAJJC Pylorus/ Orifice Valve
 OAJK Small Intestine
 OAJKB Caecum
 OAJL Large Intestine
 OAJLB Rectum
 OAJM Liver/ Biliary Tract
 OAJN Spleen/ Lymph Tracts
 OAJO Peritoneum
 OAJP Pancreas

<p>OAK Cardiovascular System OAKB Heart OAKC Blood Vessels OAKCB Arteries OAKCC Veins OAKCD Capillaries OAL Respiratory System OALA Respiration OALB Nose/ Nasal Sinuses OALC Larynx OALD Trachea/ Bronchi OALE Lungs OALEB Pleura OALF Diaphragm OALG Mediastinum OAM Urogenital System OAMB Kidneys OAMC Bladder OAMD Male Genital Organs OAME Female Genital Organs OAN Nervous System OANB Central OANBB Brain OANBC Spinal Cord OANC Peripheral OANCB Autonomic OAND Nerve OAO Musculo-Skeletal System OAOB Bones OAOBB Vertebrae/ Spine OAOA Muscles OAOJ Joints OAOBB Ligaments OAP Connective Tissues/ Integumentary Systems OAPB Skin/ Hair/ Nails OAQ Endocrine System OAR Body Fluids OARB Lymph OARC Blood OARD Cerebrospinal OARE Saliva OARF Tears OARG Gastric OARH Urine OARI Sweat OB Problems OBB Diseases/ Pathological OBC Toxicology OBCB Alcohol OBCD Poisons OBM Metabolism OBN Nutrition OBP Public Health/ Hygiene</p>	<p>W METHODS WB Historical WE Experimental WEF Field WEG Laboratory WM Mathematical WMD Analysis WME Statistical/ Probability WMEB Design WMEBB Factorial WMEBC Covariance/ Correlation WMEBD Regression WMEBE Least Square WMEBF Variance WMEC Nonparametric WMED Test WMEE Distribution WMEF Stochastic WMEG Sampling WMEH Estimation WMF Decision Making/ Game WMFB Optimization WN Systems Analysis/ Operations Research WNB Models/ Modeling WS Medical (See also Treatment/ Care, JRG) WSB First Aid WSBC Maintaining Airways WSBCR Resuscitation WSBCRM Mechanical WSBCRN Mouth-to-mouth WSBCT Tracheostomy WSBD Bleeding WSBE Splinting WSC Diagnosis WSD Surgery WSDB Plastic WSDC Geriatric WSDD Pediatric WSD E Military WSDF Experimental WSDG Amputation WSE Therapeutic WSF Anesthesia WSI Autopsy/ Pathology WSX X-Ray WU Testing/ Measures WUB Parameters WUP Physiological WUPB Pulse Rate WUPC Respiratory Rate WUPD Blood Pressure WUPE Blood Flow/ Cardiac Output WUPJ EEG WUPK EKG</p>	<p>N PHYSICAL ASPECT NK Operating Conditions NKC Pressure NKE Acceleration/ Deceleration NKF Frequency/ Time NKFB Reaction Time NKFD Latency NKFF Delay NKFP Period NL Phenomena NLE Impact NLG Distance/ Range NLGB Mileage NLP Sound NLPC Ultrasonic/ Supersonic</p> <p>Q EDUCATIONAL ASPECT QC Principles QD Teaching/ Training QE Materials/ Equipment QF Education Measurements QG Education QGE Safety QGM Medical QGMF First Aid (Red Cross) QGMG Advanced (Red Cross) QGMH Comprehensive QGMI Professional/ Physician QH Teachers/ Instructors</p> <p>S SOCIOECONOMIC ASPECT SB Social SBB Behavior/ Mores SBC Population/ Demography SBD Politics SBE Public Opinion SC Economics SCB Macroeconomics SCC Microeconomics/ Price Theory SCD Economic Behavior SCE Cost/ Benefits SCF Cost Effectiveness SCG Budgets/ Budgeting SCH Finance SF Measures SFB Safety SFC Service SFD Community Support</p> <p>V DISCIPLINES VK Social Sciences VL Engineering VM Biomedical Sciences VMB Biomechanics VN Epidemiology/ Etiology VQ Information/ Communication VR Law VU Human Engineering/ Ergonomics</p> <p>I SERVICES IE Communications IF Vehicle IFB Service Stations IFC Towing IH Parking IM Road Maintenance IO Hospital (See also Hospital Care, JRJ) IQ Ambulance (See also Recovery of Injured, JR)</p>	<p>Y STUDY-REPORT TYPE YC Nature of Study YCB Research YCC State-of-the-Art YCD Survey YCE Theoretical YCF Systems Study YCG Laboratory Experiment YCH Field Experiment YCI Design YCJ Future/ Projection YCK Case Study YCL Evaluation/ Effectiveness YE Contents YEB Proceedings YEC Bibliography YED Abstracts YEE Reviews YEF Data Statistics YEG Tables/ Graphs YEH Diagrams/ Plans YEI Photographs/ Illustrations YEJ Hearings YEK Law/Code/ Statute YEL Patent YEM Instructions/ Specifications YEN Standards YEO Maps YEP Flow Charts YEQ Biographies YER General Discussions YES Computer Programs</p> <p>ENVIRONMENT K SPACE KB Terrain/ Habitat KBB Flat KBC Rolling KBD Hilly KBE Mountains KBF Desert KBG Vegetation KBH Cultivated KBL Rural KBL Suburban KBM Urban/ Town/ City KL Zone/ Land Usage KLB Residential KLC School/ Hospital KLD Farm KLE Park/ Resort KLF Business KLI Industrial</p> <p>L TIME (See also Frequency/ Time, NKF)</p>
<p>P PSYCHOLOGICAL ASPECT PB Senses PC Personality PCB Measures PCC Typologies/ Clinical Diagnosis PCCB Alcoholism PCCC Suicide/ Homicide PCCN Neuroses PCCP Psychosis PCD Past Experience PD Cognition PE State of the Organism PEB State of Arousal PEF Fatigue PF Behavioral Factors</p>	<p>X EQUIPMENT XX Computers XT Medical XTB Breath Analyzer XTC Chemical Test (Blood Alcohol) XTF Splints XTG Stretchers XTH Backboards XTI Resuscitators XTJ Aspirators XTK Oxygen Supply XTL Airway Maintenance XTM Hemorrhage Control XTP Pacemaker XTQ Defibrillator</p>		

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- S** **Socioeconomic Aspect**
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