

Book Reviews

BIRTH DEFECTS AND DRUGS IN PREGNANCY. O. P. Heinonen, D. Sloan and S. Shapiro. Publishing Sciences Group Inc., Littleton, Massachusetts. 1977. pp. 516 + xi.

This book presents some of the long-awaited data from the Collaborative Perinatal Project. There is a wealth of information on the occurrence of various defects, on the associations among various malformations and on the use of medications during pregnancy (at least during a recent period of contemporary history). The subject matter is treated in basically three sections: (1) Background and Methods, (2) the Malformed Children and Related Risk Factors Other than Drugs, and (3) Evaluation of Drugs in Relation to Malformations.

Easily the most important section of the book is the section on background and methods. Here the authors lucidly explain their techniques, the pitfalls and the limitations of analysis of the data from the Collaborative Project. All of the many tables in the rest of the book are fascinating but should not be used without reading these prefatory remarks and the notes accompanying the tables. Chapter 19 on the "General Approach to the Evaluation of Drugs in Relation to Malformations" is particularly important.

From their extensive analyses of the data, the authors conclude that no agents comparable to thalidomide were identified. However, it can be argued that the exposure of the study group to some drugs that are accepted to be teratogens by many teratologists (e.g., diphenylhydantoin and warfarin) was too infrequent to detect their teratogenic action.

This is an important book and it is highly recommended to anyone concerned with birth defects in humans. If the individual cannot afford the luxury (\$70) of a personal copy, the nearest library should certainly be urged to purchase a copy.

MASON BARR, JR.
Department of Pediatrics
University of Michigan

DRUG EFFECTS ON THE FETUS. H. Tuchmann-Duplessis. Publishing Sciences Group, Inc., Acton, Massachusetts. 1975. pp. 265.

This is a personal book reflecting the exper-

ience of the author in the field of teratology and his concern with the roles or possible roles played by drugs in teratogenesis. Professor Tuchmann-Duplessis includes short chapters on prenatal physiology, placental function and embryo nutrition. Then he discusses some general principles of drug-induced congenital abnormalities and the classification of malformations. Further chapters review mechanisms of dysmorphogenesis, etiologies of malformations, and screening methods for detecting dysmorphogens. The final chapters review various teratogens by broad classifications.

The book suffers, as all books on this topic must suffer, from incompleteness and obsolescence. It is not an exhaustive review of the subject but rather an expanded outline of a large field of study. Treatment of the subjects in the opening chapters is too brief, although there are a number of very nice illustrations and diagrams summarizing dysmorphogenetic mechanisms and pathways. Since this is an exposition of the author's experience and opinions, statements are sometimes made with little or no documentation. For example, discussing modification by maternal disease of drug equilibration across the placenta, the author states: "This may explain the higher susceptibility to environmental factors of pregnant women who have a metabolic disease" (p. 19). But there is no further discussion of this idea, either in this chapter or later in the book when the idea is restated (p. 46).

The book's style and presentation are much like a lecture and therefore, easy to read and understand. Unfortunately, there is no chance to ask questions after the lecture, and the author has given insufficient references for some of his more challenging statements. For example, it is not clear what is meant by the assertion, "It can also be concluded that fetal infection with the natural [rubella] virus is very exceptional" (p. 124). Many teratologists would disagree with the view (p. 40) that environmental agents cannot affect the development of the embryo after the eighth week of pregnancy.

The discussion of the various drugs is somewhat uneven, sometimes referring to exotic single drugs (Sarcosine), sometimes to whole classes (sulphonamides), sometimes in

reasonable detail (rifampicin), and sometimes in no detail at all (antiparasitic drugs). The subject index is less useful than it ought to be since many of the drugs discussed in the text are not listed in the index.

It is regretted that this monograph does not give the reader enough of the unquestioned expertise and experience of the author. Given the limited usefulness and built-in obsolescence of a book of this type, it is greatly overpriced at \$20.

MASON BARR, JR.
Department of Pediatrics
University of Michigan

DEVELOPMENTAL PATHOLOGY OF THE NEONATE.

J. C. Larroche. Excerpta Medica, Amsterdam, 525 pages.

The author of this book defines its scope in the preface. The basis for the book is her long experience in the pathology of neonates. She states quite succinctly the areas in which she has no experience—and which will be given no coverage. Similarly, she does not cover extensively those things she feels are well covered elsewhere or which are more apt to be problems later in life.

A positive feature of the book is the detailed early section with weights of organs correlated with gestational age and birth weight and formulated from the author's large population. Included in the book are two chapters dealing with the pathology of "therapeutic procedures"—umbilical vessel catheterization and endotracheal intubation. They are concise, practical and pertinent. The several chapters on neuropathology are inclusive and well illustrated. They may represent the highlight of the book.

In general, however, the book is a disappointment. The author gives her experience with various lesions appropriately, but the discussions which follow are frequently a review of material readily available elsewhere—and also old. A frequent reference through all chapters is Potter's book—the 1953 edition. *Developmental Pathology of the Neonate* was published in 1977 and while it may have overlapped with the 1975 third edition of Potter, there is a 1961 edition available. Journal references are also delayed. For example the concept of the continuity of neonatal hepatitis, choledochal cyst and biliary atresia, as well summarized by Landing in

1974, is not mentioned. (Latest liver reference is 1972.)

The author is French; the book is written in English and published in Amsterdam. Some discussions/opinions may have been "lost in translation." For example: the discussion of hypoplastic left heart begins with the discussion of endocardial fibroelastosis and its relationship to earlier myocarditis and then goes on to give the author's cases with EFE and without. Even with a second reading, the direct cause-effect implication is there without explanation/speculation of the HLHs seen there (and by others) without EFE. Similarly, she equates pulmonary sequestrations and cystic adenomatoid malformation as histologically the same.

Most of the illustrations in the book are good. Pictures of gross specimens are numerous and particularly sharp, except for their annoying propensity to have the handwritten case number lying in any of several axes, and sometimes over a pertinent part of the specimen. The microscopic pictures are intermittently fuzzy, usually at low power. Incidentally, rarely in the book do they tell you the magnification of the pictures—even in composites where features are being compared to each other. Presumably, except as noted, they are all hematoxylin and eosin stained.

From the editorial point of view, the book is very distracting. Even given the continental spelling variations and the possible translation error, there are multiple spelling/typographical errors. Proofreading problems (?) lead to misspelled names in references; Wilms' spelled incorrectly and several randomly checked references are not listed at all in the bibliography or are listed inaccurately. In the liver chapter the remnant of the umbilical vein is called the "ductus arteriosus," rather than the "ductus venosus."

The bibliography is inconsistent. At the end of some of the chapters, it is effectively divided by topics. At the end of others, there is just one long bibliography, although the preceding chapter is subdivided.

In summary, while the illustrations are good, I think most neonatologists, pathologists, and other interested parties, would do better to seek out a more recent, more complete text, albeit possibly sacrificing number and clarity of pictures.

KATHLEEN P. HEIDELBERGER
University of Michigan