Book Review


Development of the human body is so wondrous and yet so common that it has compelled man's attention and aroused his curiosity from the earliest of times. Without doubt, development of the nervous system has been to many a central theme through the ages of scientific inquiry. By the beginning of the century, increasingly skillful experimentation in lower animal forms began to accelerate the slow advance in our understanding of the normal and abnormal nervous system. In more recent years there has been more rapid progress in related disciplines from cell biology to epidemiology—progress that now calls for a bridging between the experiments of the laboratory and the experiments of nature. With the advent of newer techniques coupled with a new breed of laboratory and clinical investigators, many old and seemingly intractable problems of normal and abnormal human development are taking on a fresh appeal. Rapid advances are surely imminent.

This volume featuring the central nervous system is the latest in an excellent series, Advances in the Study of Birth Defects, conceived to provide comprehensive and up-to-date information for clinicians concerned with healthy children and for researchers addressing the causes and recognition of birth defects.

Turning attention to this volume, several general comments are in order. The book, with one or two exceptions, is well produced. (Yet, it is amazing to see just how much it costs to market a book of 181 pages.) Readers will find that the chapters read clearly; yet the continuity between chapters at times seems weak relative to the central theme of the volume—the central nervous system. While each of the eight chapters has a usually current bibliography, those of us who expect complete citations, including full pagination, will once again see where the completeness of citation formats seen in our leading scientific journals succumbs to the cost-saving policies of commercial publishing companies. For those who draw upon text and journal illustrations for seminar and lecture slides (giving full acknowledgments, of course), the quality of the halftones and photographs in this volume leaves much to be desired.

As to content, the volume deals with normal and abnormal development of the central nervous system with a well-masked tie to craniofacial malformations, even though state-of-the-art knowledge shows well the need to link these body areas in our thinking. Chapter 1 is an excellent descriptive approach to the incidence and morphology of nervous system defects seen in a series of human abortuses of differing ages. Epidemiologic patterns of anencephaly are well addressed in Chapter 2, which should be must reading for those who wish to learn or refresh knowledge of what variables affect incidence figures. Chapter 3 is one of the most thorough available coverages of craniofacial development in anencephaly. The combined approaches of histology, radiology, and cephalometry make this a most original chapter. For some reason, undoubtedly good, Chapter 4 on cleft lip and/or palate is included and consists of a bland literature review taking up 16 pages of text. After the side-trip of Chapter 4, the effects of abnormal central nervous system on midfacial features are summarized in such a way as to make this chapter appealing to the syndromologists among us. Now broadly defining central nervous system, Chapters 6 and 7 provide good reviews of sense organ abnormalities with excellent attention given to teratogens highly implicated in abnormal eye and ear development. It is refreshing to see Chapter 7 emphasize the team-approach in management of these defects. The question of "Where do we go from here?" is addressed in Chapter 8 on the prevention and prenatal diagnosis of neural tube defects.

Collectively, this volume offers reasonable information and some scholarly stimulation to those interested in major problems and concepts in understanding the nervous system. Even at its price, this volume should not be overlooked.

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