Book Reviews

Symposium on the Functional Physiopathology of the Fetus and Neonate: Clinical Correlations.

The book is a report of a conference held in New York in February 1970. The participants included pathologists, obstetricians, paediatricians, geneticists, virologists, and biochemists. The first part of the book deals with some of the newer diagnostic approaches to the human fetus and its environment, from early pregnancy until delivery. There is also a good summary of the factors influencing the development, fertilization, and implantation of the ovum. One chapter is devoted to the detection of genetic disorders, particularly by amniotic fluid examination. Current methods of intrapartum monitoring of the fetus are described. There is a concise summary of the assessment of gestational age in both fetus and neonate.

The second part of the book is concerned with pathology. There is a good account of the pathology of aborted fetuses, providing information on the incidence of chromosomal abnormalities.

A chapter devoted to placental morphology in abnormal pregnancy lacks clarity compared to the rest of the book. There is a useful summary as to what is known about the prevalence and incidence of bacterial and viral infections.

The third part of the book is concerned with the need to improve the standards of perinatal pathology, and much of the rather lengthy discussion is not really applicable to the U.K.

The book should prove useful and stimulating to all who are concerned with fetal medicine. As with many such symposia, it provides useful summaries as to present knowledge and is also a valuable source of references.

Endocrine Regulation of Human Gestation.

This report is the result of deliberations by 10 of the most eminent workers in this field. The contents concern oovimplantation and steroid production in the feto-placental unit, the production of catecholamines and the renin-angiotensin system in pregnancy. There is a brief review of the current theories concerning the onset of labour, and finally a review of the endocrinology of abnormal early and late pregnancies.

The synopses are critical assessments of present beliefs, at the same time making clear where certain theories have little or no support on experimental or clinical grounds, for example the use of progestogens in threatened abortion.

This report will be of value particularly to practising clinicians to bring them abreast of current concepts, and to students of obstetrics and gynaecology to familiarize them with such facts of endocrinology of pregnancy as are established. It is not suitable for the advanced student of endocrinology because of its brevity, lack of discussion in depth, and the virtual absence of references.

Finally, the most challenging aspect is the extensive list of suggestions for further research, which itself reveals our astonishing ignorance in this subject and the urgent need for further research.


Intrauterine infection can be responsible for devastating damage to the developing fetal brain. The number of organisms now known to be capable of causing such damage is growing, and it seems likely that an infective aetiology for many cases of mental retardation in children may have been missed in the past. In this paperback volume of 84 pages, 9 papers on prenatal infections are presented. They were given by experts at an International Symposium held in Vienna in September 1970. Congenital listeriosis, toxoplasmosis, rubella, cytomegalovirus, herpes simplex virus, and Mycoplasma pneumoniae infections are discussed, and interesting information about all of them is summarized, with a useful list of references at the end of each paper. The problems of diagnosis, and the possibilities of treatment are reviewed. In addition, there is a paper on the helpfulness of fetal antibody in diagnosis of chronic intrauterine infections, a brief discussion of prenatal incubation period, and a study, the ethics of which are debatable, on the maternal-fetal distribution of drugs. The papers are in English, though this is clearly not a language in which two or three of the speakers feel at home.

The Dental Care of Handicapped Children.

Miss Joan Weyman, the author, and Mr. G. H. Steel, who has contributed a chapter on clefts of the lip and palate, are well known to students of British dental literature.

The author does not attempt to write a text on handi- caps or a text on paedodentics but produces an amalgam of the two, including her approach to patient management and some prescriptions for treatment. She is obviously deeply clinically involved and many young practitioners will find her suggestions on patient
management helpful, not only with handicapped children but with others also.

She brings into a remarkably small compass material which the reader would otherwise have to sift out for himself from very many more detailed texts. The first 95 pages describe the background of handicaps including aspects of their general care and management. In each instance this is followed by reference to the associated oral condition and, finally, the implications and advised dental treatment. It is in relation to the implications and associated oral conditions that the book has value for it will assist the practitioner in selecting those cases that he can manage himself and those that he should refer for advice and/or treatment to hospitals or special units.

The book is well produced, with 7 pages of photographs together in the centre. There are a few misprints, e.g. 'reasonable' pastes on page 102—but it makes easy reading. There are, however, some criticisms. Firstly the author shows that by virtue of their handicaps the children considered present problems in dental treatment, and yet little emphasis is laid on prevention—mention is made of the use of fluoride tablets, diet, and battery-powered toothbrushes, but surely this is an area in which the general dental practitioner should be encouraged to play a more important part in the 'health team'. Perhaps a future edition may give more attention to the prevention of dental caries. Secondly, the selection of prescriptions for treatment in a text of this size cannot be comprehensive and is likely to represent personal preferences or rule of thumb. It would have been preferable if various approaches to treatment had been mentioned leaving the reader to refer to the bibliography for details of techniques, rather than to enumerate the steps of a single personally preferred procedure.

It is difficult to produce a text that will reach the unaware and persuade them to treat handicapped children, but this book should encourage the interested practitioner to enlarge his experience.

The dental implications of the handicapping conditions mentioned in this book will be of interest to medical practitioners and there should be a place for it in a library open to senior medical students and house staff, as well as on the bookshelf of the general dental practitioner.


The study of finger and footprint patterns and hand lines, once only of interest to the police and the palmist, is now recognized as a useful diagnostic aid. Though at present this is a tool that seems to be chiefly concerned with mental retardation syndromes, according to L. S. Penrose, 'almost every kind of early growth disturbance which effects the limbs produces some dermatoglyphic effect.' If so, it behaves the paediatrician to make himself au fait with the matter.

This little book assumes the reader to be in total ignorance of this subject, an assumption exactly applicable to this reviewer. After spending a short time looking at the very clear illustrations, however, one at least no longer finds oneself instinctively turning away from any paper presenting dermatoglyphic illustrations.

Dermatoglyphs of the following syndromes are illustrated: trisomies G, D, and E, cri du chat, Turner's, Klinefelter's, XYY, XXXY, de Lange, prenatal rubella, Rubinstein, hypercalcaemia, cerebral gigantism, Smith-Lemli-Opitz, and Prader-Willi. It is a useful book to have at hand in the clinic.


Epidemiology is a search for patterns in the hope that these will point to causes and thence to prevention. It is therefore no surprise that a volume devoted to epidemiology is of special interest to paediatricians, nor that many of the contributions are directly concerned with childhood. It is opportune that clinical epidemiology should be flowering at a time when it seems probable that the hitherto fragmented medical services for children are approaching a long overdue integration.

Professors Cochrane and Holland review critically the validation of screening procedures and conclude, as others have done, that many of the screening tests advocated, including some widely practised, have little scientific basis. Cervical cytology, for instance, rushed in on the wings of emotion and politics, and these two potent forces are likely to inhibit any objective assessment for many years to come. The short list of 'tests which are considered acceptable' all relate to children, with the sole exception of screening for bacteriuria of pregnancy. Testing newborns for dislocation of the hip and phenylketonuria are acceptable, but it is difficult to reconcile these to the authors' definition of a screening programme as one which 'offers tests to volunteers, using the hope of medical benefits as a means of persuasion'.

Respiratory disease in childhood (Dr. Colley) reviews the relation of social class, air pollution, and childhood smoking to mortality and morbidity from respiratory disorders, both in childhood and in adult life. Though the evidence is not yet conclusive, there are strong hints that chesty children tend to become chesty adults. Whether chesty disease in later life can be prevented by more effective prevention and treatment of childhood chest infections remains to be seen. Undoubtedly childhood is the most hopeful time for education about smoking hazards.

Birmingham provides two authoritative contributions to this volume. Professor Knox describes (under a misleading title) the available methods of analysing the distribution of disease in time and space. Professor McKeown and Dr. Record write on early environmental influences on the development of intelligence, a subject of great interest and even greater complexity. Their rather surprising conclusion that abnormalities of pregnancy and labour, birthweight, and length of