

**The Congenital Methemoglobinemias. Physiology and Pathophysiology of the Hemoglobin Metabolism.** By OTMAR TÖNZ. *Bibliotheca Haematologica* No. 28. (Pp. v + 146; 28 figures + 6 tables. sFr./DM 39, US \$9.35, 78s.) U.K. Distributors, London: Academic Press. New York Basel S. Karger. 1968.

The congenital methaemoglobinaemias result from a failure to maintain haemoglobin in its normal reduced or ferrous state, either because of a structural abnormality of the haemoglobin molecule, as in Hb-M disease, or because of a deficiency of one of the enzymes concerned in the reduction process. A proper understanding of this group of disorders thus requires a broad knowledge of the structure and properties of haemoglobin and of red cell metabolism. In his excellent monograph, Dr. Tönz discusses these matters lucidly before passing on to a full account of the pathogenesis and clinical features of each of the two groups of congenital methaemoglobinaemias. The book is completed by a technical section and an account of the author's own experimental studies on cases of each type. It will be of interest chiefly to laboratory haematologists, but it can also be confidently recommended to clinical paediatricians, as the best available account of these diseases. Unfortunately, at over 6d a page, the price seems excessive for a not extravagantly illustrated paperback.

**Fetal Malformations Caused by Amnion Rupture During Gestation.** By RICHARD TORPIN. (Pp. xii + 165; 71 figures + 1 table. \$11.50.) Springfield, Illinois: Charles C. Thomas. 1968.

Theories regarding the causation of congenital defects have a remarkable capacity to arouse unscientific passions aimed at their defence or demolition. The roles of maternal emotions, of intrauterine compression, and of amniotic adhesions will be hotly debated for many years to come.

While such exchanges of opinion are inexpensive fun, any attempt to assemble facts costs much time and trouble. Dr. Torpin is an obstetrician whose interest in amniotic adhesions was stimulated by personal observations, and who subsequently took the trouble to comb the literature of the subject and to carry out some experiments with amnion.

The resulting book is primarily a comprehensive review of almost 500 articles culled from the medical literature of many countries over more than 150 years. Their essence is presented in short and readable chapters. There are many illustrations, both photographic and line drawings. (Some of them are a trifle gruesome, and the book should not be accidentally left on the nursery table.)

In spite of all this work, there still remains a wide gulf between the recorded observations which Dr. Torpin summarizes, and the hypothesis he proposes to explain them. The theory may attract no converts, but the homework has been done very thoroughly.

**The Neonate with Congenital Heart Disease.** By RICHARD D. ROWE and ALI MEHRIZI. Vol. 5 in the series *Major Problems in Clinical Pediatrics*. (Pp. xiv + 445; illustrated + tables. 106s.) London, Philadelphia, Toronto: W. B. Saunders. 1968.

The reviewer confesses to having started to peruse this book with some mild prejudice, questioning whether neonatal cardiology really justified a separate book, having regard to the admirable texts on paediatric cardiology already available. But the fact is that much of the most severe congenital heart disease presents in an acute form in the neonatal period. The difficulties the paediatrician is faced with in handling these acutely ill babies are not only very great, they also differ in many ways from those at all later ages. The patency of the foramen ovale and ductus, with the complex shunts to which they can give rise, and the difficulty of distinguishing between a cardiac versus a pulmonary cause in a cyanosed and distressed baby are obvious examples.

For these reasons it seems both logical and practical to devote a book to neonatal cardiology; its perusal quickly overcame the reviewer's prejudice on the matter. A good example of the usefulness of the book is the section on the normal ECG in the premature and full-term infant, delineating well a picture which is changing during the course of the first 24 hours.

This volume is in the same series as Avery's *The Lung and its Disorders in the Newborn Infant*, also reviewed in these columns. It makes a worthy companion volume, and without doubt, Rowe and Mehrizi will be found alongside Avery in many a centre where newborns are cared for.

**The Lung and its Disorders in the Newborn Infant.** 2nd edition. By MARY ELLEN AVERY. (Pp. xvii + 285; 91 figures + tables. 81s.) London, Philadelphia, Toronto: W. B. Saunders. 1968.

The enthusiastic welcome accorded the first edition (1964) of this book when it was reviewed in these columns must certainly be given again to this second edition, despite the steep rise in price from £2 6s. to £4 1s. Many of the omissions and points which could be criticized in the previous edition have been corrected, and the book is admirably up to date.

When discussing controversial or poorly understood subjects, such as the aetiology and treatment of respiratory distress syndrome, Dr. Avery likes to adopt an historical approach, and to set down past or present theories, while gently pointing out their defects. It was this approach perhaps that led some reviewers of the first edition to criticize the authoress for not more ruthlessly excising irrelevant deadwood. However, careful reading invariably shows Dr. Avery leaving one in no doubt as to her own opinions. Indeed, it is most useful to have references to past work, for data interpreted originally as pointing to one conclusion may later be resuscitated to provide support for some quite different theory.

This is a book that should be permanently at hand in all centres caring for the newborn.

**Die intermittierende Kontrastmittelinjektion in das Herz.** By NIKOLAUS SCHAD. (Pp. 116; 47 figures + 30 tables. DM. 47.50.) Stuttgart: Georg Thieme. 1967.

An accurate anatomical as well as haemodynamic diagnosis has become an essential step towards surgical correction of congenital heart disease. No matter how radiological recording is made, whether by cine-angiocardiology, on roll-film or cut-film, multiple selective injections into the various chambers of the heart and great arteries have become standard practice. Yet one of the problems has been the fact that such injections are not without their dangers, especially in the very ill and the very young. Dr. Schad, Senior Lecturer at the Institute of Radiology of Zürich University, has for some years worked on techniques to reduce the amount of contrast medium necessary to give good visualization and on the means of timing such injections within any part of the cardiac cycle. This little monograph describes the result of his work and gives the theoretical, technical, and cardiological basis of his studies.

The book begins with an introductory discussion of the aims of the work followed by a description of the method, a theoretical discussion of the relation between the amount and rate of injection, timing of injection, and degree of contrast medium dilution. The author then gives a detailed description and discussion of the technique of intermittent contrast medium injection, including a full account of the apparatus developed by him and his collaborator, Dr. J. P. Stucky, who designed an injection pump with a very rapid pressure rise, the prerequisite for intermittent timed injections. The various radiological aspects are then discussed in relation to the injection technique. The text ends with a short description of the application of the method to the study of congenital and acquired heart lesions. There is a good list of references and a satisfactory subject index. The text is complemented throughout by excellent diagrams, tables, and *x*-ray reproductions.

The organization of the material and the style of writing are such that anyone familiar with angiocardiology will be able to understand the text, even though his command of German be limited. The method described by Dr. Schad is an elaboration and refinement of existing ones: it is of considerable practical value, and a careful study of the book will prove profitable, particularly to those who investigate young children with congenital heart disease. The only cautionary note must be that the cost of the apparatus ('Contrac Syringe') which is an essential part of the described method is, in this country, formidable: manufactured by Siemens and marketed by Sierex Ltd., it costs £2630.

**Anaesthesiology and Resuscitation—29. Kontrolle der Ventilation in der Neugeborenen-und Säuglingsanaesthesie.** By U. HENNENBERG. (Pp. vii + 73; 25 figures. DM. 19.80, \$4.95.) Berlin, Heidelberg, New York: Springer-Verlag. 1968.

This monograph, which is accompanied by a large bibliography, discusses the monitoring of ventilation in newborn and children under anaesthesia. It advocates the use of the pneumotachygraph, and stresses once again that when infants are on artificial ventilation this can be controlled adequately only if estimates of either alveolar gases or arterial gases are undertaken. As the measurements were made in 21 children with an age range from 8 hours to 3 years, it cannot be said to give adequate values for normality.

**Orthopaedic Surgery in Infancy and Childhood.**

3rd edition. By ALBERT BARNETT FERGUSON, JR. (Pp. xv + 705; illustrated. 170s.) Baltimore: Williams and Wilkins. United Kingdom agents: E. & S. Livingstone. 1968.

This volume is the third edition of the work since 1957, and during this period it has also been reprinted on three occasions. Such demand for a specialist textbook is adequate testimony to its popularity, which in turn is based upon the extensive scope of the volume which is firmly based upon the work and experience of the surgeons at the Children's Hospital of Pittsburgh.

The present edition is brought up to date largely by adding fresh material, and this is now a bulky volume written in a style which is often clumsy to English ears. Consequently even individual chapters, written principally on a regional basis, are difficult reading at one sitting.

Nevertheless, the coverage of orthopaedic surgery of childhood is wide, and a list of references from the literature, principally American but some British, is given with each chapter.

Naturally the emphasis on management of orthopaedic conditions varies between Britain and the United States as well as in various centres in these countries. Consequently the stress in this volume on the use of corrective splints for conditions of young children's feet and legs is greater than in standard British practice. On the other hand, less stress is placed on the conservative management of scoliosis, while the treatment recommended for congenital dislocation of the hip is similar to that recommended in most centres in this country. The section on rheumatoid arthritis is particularly incomplete and gives no clear guidance on the use of steroids, and no references.

The book is well printed and illustrated and will continue to provide valuable information for post-graduate training. When a fourth edition is produced, as will surely become necessary, it is to be hoped that the text will be condensed and the references brought up to date, as comparatively few refer to work published in the past decade.