
Down's anomaly has always been a meeting point for paediatricians, geneticists, haematologists, and psychiatrists. However, since the discovery of the cytogenetic abnormalities, and the burst of research that has followed this, it has become increasingly difficult for workers in one discipline to keep abreast with advances in others. The importance of this new monograph is immediately obvious. The authors have covered the range of medical practice and basic sciences related to Down's anomaly and aimed at producing a reference manual. In this aim they have succeeded admirably.

After a historical introduction, the first third of the book is devoted to a detailed clinical description of the syndrome, including radiological findings and a chapter on mental development. There is a valuable and lucid chapter on dermatoglyphs which is well illustrated. After comprehensive chapters on the haematological and biochemical changes, there is a critical account of the diagnostic difficulties, with a statistical analysis of the different features of the syndrome, and the importance of such analysis regarding partial or incomplete mongolism is clarified.

There follows a detailed and exemplary review of the cytogenetics covering in addition to the standard trisomy and translocation mongols, the problems of mosaicism, partial mongolism, and additional chromosome anomalies. The book is completed with vital statistics of incidence, life span, and causes of death; a stimulating chapter on aetiology discussing possible causative mechanisms by which the cytogenetic abnormalities arise; and a chapter entitled 'Treatment' consisting mostly of genetic counselling. There is a bibliography of some 700 references and an adequate author and subject index. It is neatly illustrated mostly with line drawings, this doubtless allowing the publication at such a reasonable price.

There is bound to be unevenness in covering such a wide field. Education and social management of mongols are hardly mentioned and this reviewer looked in vain for some speculative discussion on the relation between the extra chromosome and the phenotypic abnormalities. But such omissions in no way detract from the immense value of this book as a comprehensive and authoritative synthesis of knowledge of Down's anomaly. It can be recommended without reservation to anyone whose work involves study of this condition, either as a clinician or as a laboratory worker.


A short time ago the second edition of David Yi-Yung Hsia's *Inborn Errors of Metabolism,* appeared. It was then pointed out that this standard work would now consist of two volumes, the second being devoted to laboratory methods. This review concerns itself with the second volume, a book of 244 pages, reviewing 123 different procedures.

It would be idle to expect that such an effort could be used as a laboratory bench book; however, there are short descriptions of spectrophotometry, electrophoresis, chromatography, estimations of albumin, pseudocholinesterase, whole blood clotting time, galactose, protein-bound iodine, oxalic acid, iron, etc. On each occasion valuable references are added.

This is a book which will be most welcome in all paediatric laboratories as a guide to further reading and for immediate advice when problems of procedures arise.


Several volumes of this huge series have already been reviewed in this journal. Trying to review Volume 2 (in two parts; total pages 1737) is like trying to review the Medical Directory—virtually impossible! The first part deals with history-taking and techniques of examination. There is considerable overlap; many systems are first described superficially, then in great detail a few hundred pages further on. The various chapters are extraordinarily uneven. Intelligence tests, EEG, ECG, chromosome analysis, isotope techniques, virology, and
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so forth, are all described in greater or lesser detail. One can only hope that no one will embark, for instance, on cardiac catheterization or paper chromatography after reading how to do it. Then again, some chapters are outstandingly good, such as those on liver function tests and haematology.

The second part starts with a sensible paediatric \textit{`Extra Pharmacopoeia'}, but then goes on to discuss the merits of sulphur, carbon dioxide, mud, sand, meadow-flower, and many other baths. This is followed by a fascinating chapter on climato-therapy, much of which is surely not only non-science, but nonsense. Finally, there are chapters on diagnostic and therapeutic radiology, accidents and poisoning, and minor surgical procedures.

This fantastic paediatric \textit{bouillabaisse} is magnificently produced by that Rolls Royce of continental publishers, the Springer-Verlag.

\textbf{Hydrocephalus and Spina Bifida.} (Developmental Medicine and Child Neurology Supplement No. 11.) (Pp. 95; illustrated. 8s.; \$1) London: Spastics Society Medical Education and Information Unit in association with William Heinemann Medical Books. 1966.

This small volume contains the proceedings of the Groningen meeting of the Society for Research into Hydrocephalus and Spina Bifida held from May 31 to June 1, 1965, and is a most satisfactory expression of the cooperation between the Society, the editors of the journal, and the publishers—the Spastics Society in association with William Heinemann Medical Books Ltd.

The volume contains the kind of mixture of clinical and experimental observations which is of most value in this rapidly expanding subject, and begins with a general review of the development of knowledge and treatment of hydrocephalus by G. H. Macnab who gave the first Cassy Holter Memorial Lecture on this occasion.

The statistical studies are represented by the papers of R. M. Laurence and of P. P. Rickham and T. Mawdsley which must be read in conjunction. The former gives detailed accurate figures of the incidence of congenital malformations of the CNS and, with the follow-up of these infants, presents a most useful picture of the natural history of such conditions as spina bifida cystica, against which Rickham and Mawdsley have been able to place their survival figures from Liverpool, where an increasing percentage of the infants have been operated on. The results show that early surgery is greatly altering the survival rate of these infants, and they point to the necessity for further study of the quality of their survival and of the problems of managing an increasing number of incapacitated children.

The analysis of the treatment of infantile hydrocephalus, using the Holter valve, in 152 consecutive cases, by Forrest, Hole, and Wynne is another thoughtful statement of the results of surgical management, presented in a form that permits useful comparisons of the spina bifida and non-spina bifida types of hydrocephalus.

The complications of ventriculo-atrial shunts include now the well-recognized entity of multiple pulmonary embolisms, and the pathological findings in this condition are described in detail by Erdohazi, Eckstein, and Crome. Hemmer from Freiburg has contributed a description of an extensible cardiac catheter which may well overcome some of the problems of growth and tension on the cardiac side of the shunt.

The embryological studies by G. J. van Hoytema and R. van den Berg from Enschede are outstandingly stimulating, and further investigations along this line may throw considerable light upon the mechanism of the hydrocephalus associated with spina bifida. Related to this topic are the graphic studies of brain-stem displacement, using angiography at necropsy, which were made by Emery; but the significance of these in relation to hydrocephalus is not yet clear.

Isotope ventriculography is a new tool in the investigation of hydrocephalus, which may throw some further light upon the dynamic aspects of the condition, but the short paper by Spoerri and Rösler on this method is disappointing in that it adds little to the findings which might be anticipated by conventional ventriculography.


This book contains an account of measurements of ventilatory function, lung volume, and certain aspects of the mechanics of ventilation in healthy and asthmatic children. There is little mention of the exchange of oxygen and carbon dioxide in the lung. There are no new ideas or techniques in this book, but the work is vigorously presented. It provides a useful source of normal values and the results to be expected in asthmatic children. The reader will also find an account of the principles underlying the tests employed, but this has been done better elsewhere in texts which have the exposition of pulmonary physiology as their primary aim. It would be very unfortunate if a student, anxious to understand how the lungs work, were to encounter such a dull book.


Since the publication of the first edition of this book in 1958, tremendous advances have been made in endocrinology. The new edition concentrates on work published between 1958 and 1965 and is in fact virtually a new book. It describes the assay of hormones including those of the pituitary gland, adrenals, and ovaries, and also insulin, prolactin, and catecholamines. In general, hormone assays are complicated, laborious, and costly. It is, therefore, important that the practising clinician should only ask for and use them in patients in whom the results are likely to be of value. As the authors emphasize, hormone assays are still largely at