Book Reviews

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on the point of dying several times during their short life, and that breast feeding, which produces a more adequate calcium intake, gives some protection.

This book will be of interest to paediatricians, paediatric pathologists, and those concerned with cot deaths, but a healthy scepticism should be maintained. The author’s survey of the literature is incomplete and biased. The field of ‘SUD’ is one in which the colourful fraternity of forensic pathologists, such as the author of this volume, regularly come forward with answers to sudden death in infancy. The views put forward by the author of the present book will certainly need confirmation. Your reviewer has not yet succeeded in this.

Febrile Convulsions. By J. Gordon Millichap. (Pp. xv + 222; illustrated + tables. 75s.) New York: Macmillan; London: Collier-Macmillan. 1968. This monograph on febrile convulsions is a detailed review of the world literature and the author’s personal experience. The first six chapters cover the incidence, clinical manifestations, investigation, treatment, and prognosis. The last chapter gives a comprehensive analysis of the experimental background, and the author suggests lines that future research might follow. There is also an extensive bibliography.

The detail is beyond the scope of the general paediatrician, particularly the chapter on electroencephalography, and the writing tends to be repetitive. However, there are concise summaries at the end of each chapter, and the whole book can be read in a few hours.

The clear histograms could prove useful for teaching purposes, for example those on pages 23 and 24 demonstrating age at the first febrile convolution, and those in chapter 5 relating age to risk of recurrence, and occurrence of non-febrile convulsions.

An immense amount of work must have been involved in the production of this monograph, but it does not really add anything new to the understanding of febrile convulsions, and the aetiology of one of the commonest clinical problems in paediatrics remains as much of a mystery as ever.

Research into Hydrocephalus and Spina Bifida. Proceedings of the Society for Research into Hydrocephalus and Spina Bifida, 1966. Supplement No. 13 of Developmental Medicine and Child Neurology. (Pp. 139; illustrated + tables. 15s.; $2.) London: Spastics Society Medical Education and Information Unit in association with William Heinemann Medical Books. 1967. This book contains the proceedings of the Cardiff meeting of the Society for Research into Hydrocephalus and Spina Bifida 1966, and covers the usual fairly wide range of subjects which are brought together in the meetings of this Society. A number of the papers contain material already familiar to those interested in this subject, such as further data from Laurence on the spina bifida cases occurring in South Wales between 1956 and 1962, and a further follow-up of the untreated hydrocephalics which he reported with Coates some years ago. Both of these add important background data which must be taken into consideration when any survey of the treated patients with spina bifida and hydrocephalus is undertaken. The surveys from Birmingham and Liverpool are perhaps less valuable in this respect. The Sheffield group presents a further detailed analysis of the survival and paralysis in open myelomeningocele which has been grouped according to the time of repair of the lesion. There has clearly been considerable attention to the statistical methods in the production of the life tables for the various groups related to the time of treatment, but a careful analysis of the distribution of the site of the lesions within the groups, and the knowledge that the infants were not allocated to groups by random distribution, but by circumstances attending their referral, suggest that these groups may not be strictly comparable.

However, the surprising thing is how close the survival of the groups treated conservatively or not treated at all comes to the survival of those treated by early operation. The analysis of leg movement used in this survey by Sharrard et al. shows some change from their earlier emphasis upon digital scoring of muscle groups, to a more general grading of the paralysis from mild to severe. This is in keeping with the neurological assessment of these lesions which are often primarily upper motor neurone in type, or a mixture of upper and lower motor neurone lesions, such that direct muscle group examination is not so relevant to future neurological function. This point is made in the short study by Brocklehurst, Gleave, and Lewin upon the ‘Early Closure of Myelomeningocele with Especial Reference to Leg Movement’; by recognizing that many, if not all, of the spina bifida lesions are in fact lesions of the spinal cord accompanied by both afferent and efferent innervation to myotomes at the level of the lesion and below, and therefore the muscle groups are functioning at a lower motor neurone level but are included in what may be either a spastic or a flaccid paralysis. In this brief study no significant improvement in the neurological function assessed in this way was found after early closure.

Some of the most interesting communications are contained in the latter half of this journal; the examination by Emery of the origin of the ultrasound waves in the normal and hydrocephalic infant brain shows clearly that there are interfaces other than the lateral ventricle walls which may give rise to misleading echoes and render this technique for the diagnosis of hydrocephalus somewhat unreliable. The radiological study of the central canal in myelomeningocele by Andersson et al. from the University of Göteborg in Sweden is particularly stimulating in relation to the embryological pathology of these conditions, and the small abstract from Grundy’s extensive work upon the circulation of the cerebrospinal fluid in the cat is of relevance to any understanding of the nature of hydrocephalus in spina bifida. Of particular interest to physiologists is the report of derangement of temperature control in hydrocephalus by Gubbay, which adds another form...
of hypothalamic dysfunction to those already recorded as accompanying hydrocephalus. Among a number of contributions from Shurtleff and Foltz the observations establishing the normal thickness of the cerebral mantle in children are perhaps the most useful.

The Society for Research into Hydrocephalus and Spina Bifida continues, by its meetings and publications, to foster interest and progress in this interdisciplinary field, and these are more likely to be maintained by attention to original contributions and research work than the repetition of variations upon the familiar clinical research themes in this subject.


This interesting and useful monograph represents a review of the histochemical studies of muscle differentiation and maturation, as presented, presumably, in the author's Ph.D. thesis. Essentially, he has examined the histochemical differences between the two main fibre types which comprise skeletal muscle. There are fundamental differences in their mode of energy utilization, and these are reflected in the enzymatic composition which can be demonstrated histochemically. Maturational differences and species variation are reviewed, and there is a critique of the relevance of this and allied studies to research into neuromyopathic syndromes and muscular dystrophy. Evidence for neural influences on enzymatic differentiation of muscle fibres is of particular interest, especially since the relatively selective distribution of weakness and wasting in the early stages of the various muscular dystrophies is compatible with the view that neural interrelations are important even in these primary myopathies.

Since this monograph holds an interest for many whose knowledge of biochemistry is, to say the least, sketchy, it is a pity that the author did not provide a more explicit account of contemporary theories of oxidative phosphorylation and the Embden-Meyerhof shunt, but doubtless the ignorant will be stimulated to go back to their books. Any raggedness resulting from the dissertational metamorphosis is outweighed by the advantages of having this compilation of data in the form of a monograph.

SIMPSON SMITH MEMORIAL PRIZE 1968

The prize shall consist of a money award of 100 guineas to be given for an essay on a paediatric surgical subject chosen by the candidate.

The prize shall be open to men and women from the British Commonwealth or the Republic of Ireland who are engaged in the practice of surgery and must be written in English.

The closing date for the receipt of manuscripts is December 31, 1970. Further information may be obtained from:

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The Secretary,
Institute of Child Health,
30, Guildford Street,