I was disappointed by the brevity of the round-table discussion. The recent advances in cranio-facial surgery, for example the multi-disciplinary one-stage repairs pioneered at L’Hôpital Foche in Suresnes, I feel should have received some mention in a book aiming to improve the quality of our treatment of patients with cranio-facial trauma.

In a book of this price ($30-90) there were an annoying number of minor printing inconsistencies; for example contrécoú, contré-coup and contré-coup. However, on balance I feel that accident & emergency surgeons would find much useful and helpful and interesting information in this volume although some of it might not be where they expect to find it.

MICHAEL BRIGGS


The general title of the series, Progress in Neurological Surgery inevitably needs justification, particularly in the face of the flood of texts which are often no more than literature reviews, extensions of earlier simpler texts (and sadly very rarely shortening and tightening of earlier texts), often without evidence of an author’s own experience.

The subjects in this volume are: cerebral oedema, infections in neurological patients, respiratory complications in neurological surgery, and venous thromboembolism in neurosurgery. The cover commendation is that it is “designed to serve as a practical guide to bedside care”. Is this compatible with “progress”, and will the book add much to the practising neurosurgeon’s armamentarium? The chapter on cerebral oedema is too long and too diffuse, and it is difficult to determine for whom the author is writing. The initial review of the mechanisms and experimental work on cerebral oedema is of value, but the more practical aspects are less satisfactory. The differentiation between pathological processes including oedema and malignant tumour by CT scan is far from established; the Glasgow coma scale is indeed used very widely in guiding management in patients with head injuries; and why does the author continue to use steroids in severely head injured patients who are in coma if his experience has not been “as rewarding” as with their use in other conditions? Phrases such as the one quoted lack the objectivity which one seeks.

Much of the chapter on epilepsy and the use of anti-convulsants would be more appropriate in a neurological text with a sizeable review of the literature; and it is disappointing to find tables which include a series with only five cases. In the section on intracranial abscess the authors might have left the reader with some recommendations based upon their own views. However their clear statement about continuing on anti-convulsants in general in the absence of seizures is very valuable, although their courage seemed to fail them when they wrote “perhaps indefinitely”. The London Hospital experience of a total of only 42 patients, half of whom were randomly assigned to prophylactic anti-convulsants, seems hardly sufficient for a study to be discontinued, and yet allow the authors to state that evidence is not complete and further work is required.

The chapter on infection contains a helpful review of antibiotics, but lacks the evidence of practical experience and guidance which comes from dealing with acute pre- and post-operative neurological problems; indeed the author reveals that at his institution only elective procedures are performed. The author relies too heavily on the literature, and fails to express his own views on prophylactic use of antibiotics, when wound infections really require antibiotics, when shunts should be removed, and when fever is common in neurological practice but not due to infection. What is the evidence that coring due to lumbar puncture can occur in acute bacterial meningitis? Fluid restriction is hardly therapeutic in those circumstances.

The chapter on respiratory complications is valuable; it contains a clear explanation of respiratory physiology and modern anaesthetic practice which will bring much to the neurosurgeon, and it is written with clarity and authority that comes from personal experience. This chapter certainly merits the general title of “progress”.

The final chapter on venous thromboembolism is commendably brief, there is a good review of general and neurological aspects and recapitulates the work from Newcastle. The author sets out the available prophylactic measures and comes tantalisingly near to making an unequivocal statement about the use of low dosage heparin in neurosurgery.

In summary therefore, the book has its limitations, and the editorial board might well have demanded from some of the authors more succinct contributions based upon practical experience, with shorter literature reviews. Thereby they could reduce the number of volumes required to cover complications in neurosurgery; at $59 a volume it is costly.

J GARFIELD


Neurologists and physiologists with an interest in muscle are aware that current physiological study is in some respects far removed from clinical problems. Increasingly, however, basic research and clinical practice meet each other—disorders of energy metabolism, ionic conductance of membranes, disorders of excitation-contraction coupling, to name a few areas. These differences in interest are emphasized by this handbook which is by no means comprehensive in its approach to muscle. It is divided into four major sections: structure, muscle contraction, excitation-contraction coupling and specialisation of adaptation. Each section is composed of several well integrated reviews, each written by an acknowledged expert. Inevitably, there is overlap between chapters but editorial selection of topics has ensured that this is not excessive and usually facilitates understanding. The considerable methodological details given reflect the level of discussion.

The section on structure contains chapters on internal and surface membrane morphology (superb scanning electron micrographs), the structure of membrane systems, quantitated ultrastructure, the use of immunological techniques to study contractile proteins and x-ray diffraction methods. The section on contraction emphasises the related fields of mechanics and energetics (a whole chapter on myosin catalysed ATP hydrolysis) but the exciting neurologist will not find here any useful summary of energy metabolism to guide him in considering a mitochondrial or lipid storage myopathy. Six chapters on excitation-contraction coupling follow, starting with the electrical properties of striated muscle and proceeding through impedance measurements, the inward spread of activation, and the use of optical probes and other methods for studying calcium release and transport by the sarcoplasmic reticulum. Subsequently, there is a fascinating chapter on the physiology of...
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insect flight muscle and then further chapters dealing with the specialisation of muscle fibre types and the significance of these for human muscle performance. Sections on myofilrill growth and a short summary on diseases of skeletal muscle are also included.

The book is beautifully produced and the photomicrographs and diagrams are of high quality. Each chapter contains a wealth of up-to-date references which should prove valuable for the research worker entering the field in question. The curiously small index reflects, I suspect, the fact that the book deals with a restricted number of topics. Any department where basic or applied muscle research is taking place will find this an invaluable reference book. The chapters are, however, not appropriate introductory texts to muscle physiology but should be considered as in-depth reviews setting out the present state of the art: in this they are most effective.

CM WILES


This book is intended as a student text in behavioural pharmacology. Introductory chapters on principles of pharmacology, neuron cytology, neurophysiology, and synaptic structure and function, are concise, clearly illustrated, well referenced, and provide a useful introduction for students in any field of neuropharmacology. The chapter on principles of behavioural pharmacology, however, with its harrowing descriptions of the muricide test for antidepressants, and the acetic acid writhing test for analgesics, sets the psychopharmacological tone for the rest of the book.

The core of this volume is organised into different chapters on acetyl choline, catecholamines, serotonin, amino acid transmitters, peptides, anxiolytic drugs, and the opiates, with an additional chapter on the treatment of schizophrenia and the affective disorders. Each of these chapters is again well produced, with illustrations of chemical formulae of drugs and of metabolic transformations. The organisation within chapters seems at first glance rather chaotic; if studiously followed, I am sure they are excellent, but as a rapid reference source they are confusing. The abbreviations list at the end includes C for carbon, little g for gram, but not ICS (for intracranial self-stimulation), which irri-

tates. A huge store of references is gathered together at the end of the book, but also at the end of each chapter appear recommended readings with a one-line appreciation of the nature of each review.

Behavioural pharmacologists in training will doubtless find this a useful and comprehensive account of their subject: others in the field of neuropharmacology will be pleasantly surprised to find in it a wealth of useful information, albeit organised along unfamiliar lines. “Non-behavioural” neuropharmacologists will probably not purchase this book, although by today’s standards it is fairly priced and very well produced. However, they may well bless their library for having a copy in their hour of need.

NP QUINN


It is probable that all present knowledge of the Dandy-Walker syndrome is contained in this excellent little monograph. Unfortunately, (in this reviewer’s opinion) few neurosurgeons and even fewer neurologists will want to know so much about this rather rare condition.

A review of definitions, literature, concepts and theories of origin is followed by a summary of experience with 37 patients. Of most importance to paediatric neurosurgeons is the authors’ final conclusion about the best method of treatment. This, essentially, consists of a cysto-peritoneal shunt preceded, when appropriate, by a ventriculo-peritoneal shunt. The very high proportion of associated cranio-cerebral anomalies helps to explain the unfavourable psycho-motor development of these children even when surgical management of the enlarged fourth ventricle and associated hydrocephalus is satisfactory.

The third section of the book on ‘Critical Analysis of Diagnostic Studies’ dwells at length upon refinements of angiography and pneumoencephalography which the authors consider still to be desirable even when computed tomography is available.

This excellent review is highly commended to those who may occasionally need to consider the management of the Dandy-Walker syndrome.

KENNETH TILL


I have kept this book by me for reference and have found it invaluable. The field of genetic disorders of the nervous system is a source of endless confusion to the tyro as its scope constantly expands, and its face changes. Two general issues have emerged in recent years to make it even more difficult. First, it has become clear that a single gene defect may cause many different clinical syndromes or phenotypes, often dependent upon the age of presentation. Second, it is all too apparent that a typical clinical syndrome or phenotype may be produced by many genetic and acquired disorders. For example, within my own field, the differential diagnosis of the clinical syndrome of dystonia now includes not only the classical conditions such as Wilson’s disease, Hallervorden-Spatz disease, Huntington’s disease and so on, but also disorders such as Leigh’s disease, GM, gangliosidosis, homocystinuria, metachromatic leucodystrophy, ataxia telangiectasia, ceroid lipofuscinosis, sulphite oxidase deficiency, Niemann-Pick’s disease—and the list continues to grow.

To disentangle the morass of data from classical descriptions of individual genetic disease is an arduous task. What the clinician needs is a reference volume based upon age and clinical character of presentation of identifiable syndromes. Adams and Lyon has provided just this. The book is divided into sections on neonatal metabolic disease, early infantile progressive metabolic encephalopathies, and late childhood progressive genetic encephalopathies. Within each age-determined section, the differential diagnosis of mental retardation, psychomotor regression or dementia, spastic paraparesis, ataxia, myoclonus, dystonia, Parkinsonism, peripheral neuropathy, seizures, stroke, and intermittent neurological syndromes is discussed. Individual disease may be described in many sections, depending upon their clinical presentation. Thus, GMs, gangliosidoses crop up in early infantile, late infantile and juvenile guises.

The accent is upon differential diagnosis and logical investigation, helped by many flow-charts of rational approaches to particular problems. These include reference to differentiation of genetic disorders from phenotypically similar acquired conditions, a distinction that is given prominence in a later general chapter. Further general