In conclusion: this small book gives a neurosurgical approach to orbital diseases and tends to be mainly concerned with surgical aspects of orbital disease rather than the wide variety of medical and paediatric conditions that might affect it.

MD SANDERS

Neurosurgical Treatment of Persistent Pain Vol. II Pain and Headache. By JAN M GYBELS, MD, PhD and WILLIAM H SWEET MD, DSc, DHC, FRCS Ed(Hon) Series Editor: PH L Gildenberg (Pp 442; Fig: 70; Price: US$129.50; £88.20.) S Karger AG, Basel. 1989.

This book is important because of its history and its authors. It is really a continuation of the classic "Pain and the Neurosurgeon" published in 1969 by White and Sweet which was itself an update of White and Sweet's 1955 book on the subject. Sweet has an extraordinarily wide experience of neurosurgery at Harvard, particularly related to pain. He has an encyclopaedic command of the literature and has maintained close touch with basic scientists. His younger co-author of this book is head of neurosurgery at Leuven with a very critical approach to his wide experience of surgery and, in addition he has contributed in substantial ways to clinical neurophysiology by way of micro-neurography.

This book provides as near to an authoritative statement on the role of neurosurgery for pain as you will get. However even here it is curiously difficult to unravel a clear answer. It is obvious that the role of neurosurgery is decreasing. One reason for this is that newer drugs such as Tregretol and new usage of old drugs such as morphine have successfully treated some patients who would previously have been candidates for surgery. Others respond to the electrical stimulation of peripheral nerves which Sweet and I introduced. Other groups respond to cognitive-behavioural treatment programmes. The consequence is that surgeons see fewer patients who are more intractable than ever. Unfortunately the results in the literature of the success of surgical intrusion often refer to patients who are no longer the subject of surgery. Intractable patients include those with nerve damage and the particularly sad group with iatrogenic nerve damage.

Gybel's and Sweet note ruefully that Fields' 1987 book on pain contains only four pages on all forms of surgery, that he omits mention of sympathectomy, cordectomy and cingulotomy and that he is sceptical about the usefulness of many other types of surgery. They add "We do agree with Fields' thought that the neurosurgical management of severe chronic pain remains in general in an experimental phase in which respect we say it resembles closely the non-neurosurgical management of such pain". That is bad news all round because it means that they are not in a position to give us a straight answer about the effect of surgery on pain.

How long does an experimental phase last? Let us take facet rhizotomy as an example. This operation has been carried out since 1960 on tens of thousands of back pain patients. Unhappy about the literature, the authors turn to an expert Don Long, and write "He has no follow-up assessment of patients thus treated at Hopkins since 1980 and consequently is not prepared to make a statement on the indications for or results of the operation. Neither are we". It would be illegal to try a new drug for 30 years and be unwilling to make a statement. If we take another example of reporting on the effects of surgery, the authors doubt that there is any difference in the effectiveness of two types of trigeminal neuralgia surgical treatment particularly if long term follow ups are included. However when they purposely carry out a poll of postoperative complications of microvascular decompression, which is reported to have a low complication rate, they find that 27 services have had 32 deaths or permanently disabling sequelae. The authors of this book are clearly most persistent scholars but they are also gentlemen who do not wish to offend their colleagues. You therefore have to read between the lines. When they conclude on percutaneous compression of the trigeminal ganglion "These enthusiastic accounts may initiate much wider use of the method" you begin to guess that it is going to be a long time before Gybel's or Sweet's patients have their trigeminal ganglia compressed.

With all their careful critical approach to the literature and to their own vast experience, clear answers are not always available even if written in their gentlemanly code. Some operations have simply not been done on enough comparable patients, adequately examined and followed. Very few patients have been assessed by independent observers which must become the surgical equivalent of the double blind test of drugs. Operations are assessed on the basis of rationale even when the rationale no longer makes any sense. For example, central myelotomies are treated as different operations at different levels because the surgeons thought they were aiming at different targets.

This book is undoubtedly the best on the subject and is written by the best qualified authors. It is difficult to read because it may have been difficult to write because the authors had to doubt politely the enthusiasms of their friends and colleagues who insisted that they had the answers where none exist.

PATRICK D WADAT


The author's ambition is to introduce the neuroimaging modalities currently used and particularly those which have an important part to play in modern neuro-diagnosis. This is reflected in the large proportion of the text devoted to magnetic resonance imaging and computed tomography. A short nuclear medicine chapter is mainly devoted to outmoded conventional technetium scanning of the brain, cerebrospinal fluid flow imaging and radionuclide cisternography. SPECTS is briefly but adequately portrayed, but in the opinion of the reviewer it would have been better to omit the former methods in favour of a more detailed consideration of the research implications and potential clinical applications of PET.

To adequately cover the more common but important neurosurgical conditions in this short text is always difficult, but the author has generally managed to do so, and include many uncommon conditions and differential diagnosis. In such a book one might expect fundamental features to be presented to the exclusion of some quite important details. Most of the description is indeed concise and accurate; there are good references containing expanded accounts of most of the briefly described conditions, and there is a good index which makes the book useful for reference. However, unfortunately some blanketed statements are made which contain significant inaccuracies. These include for example, that dural angiomatos malformations are exclusively supplied from the external carotid artery (p 262), and that normally the thalamostriate and internal cerebral veins are the first to fill in carotid angiography (p 272). Some conditions are included in differential diagnosis which are so rare as to be misleading, such as metastases as a cause of suprasellar calcification, temporal glioma as a cause of middle ear mass lesion, and free fat in CSF spaces occurring in conditions other than a ruptured dermoid. Occasionally, reliable signs used in differential diagnosis are not mentioned, such as visualisation of the
pituitary stalk in CT diagnosis of empty sella.

A section on interventional neuroradiology is really too short and sketchy to be useful, and the brief account of spinal angiography contains an unhelpful classification of angiomas which omits the common dual AV fistula.

Also, there are a few rather careless errors: for example, hypoplasia of the basisphenoid, with shortening of the clivus and small condyles, is described under the heading “Basisphenoid Hyperplasia”; and under the Davidoff Dyke syndrome there is a sentence discussing thinning of the calvarium by a cystic mass which presumably relates to an immediately previous paragraph dealing with porencephaly.

The text is extensively illustrated, mainly with very adequate images, but some of the radiographs have not reproduced well and occasionally the relevant features can hardly be detected: for example, calcification in tuberous sclerosis (Fig. 2.26) and the arcuate foramen (Fig. 9.3). There are occasional inaccuracies in captions, such as the tentorial artery being described as the posterior communicating artery (Fig. 5.25).

The concept and lay-out of the book are fine, but it really needs some revision before it could be recommended unreservedly as a good introduction to neuroimaging.

BRIAN KENDALL

**Book reviews**


This book brings into focus the controversy of single-case studies. The case described is that of MK, a stroke patient whose language deficits include difficulties in naming, repeating words, reading and comprehension. The literature related to these symptoms is usefully summarised. In addition to a comprehensive review of the available tests for both input and output systems, the authors have devised some innovative tests of their own. Psycholinguistic models are then applied in an attempt to show that these diverse manifestations originate primarily from an impairment of phonological processing.

This method of viewing single-case studies as the primary empirical source is now standard in cognitive neuropsychology, where they form the basis for generalisations, a very different approach from single-case studies in medicine which document exceptions.

Although the theoretical status of single-case studies will remain controversial, and not universally accepted by neuropsychologists or clinicians trained in epidemiological methods, the book will prove useful for those wishing to expand their knowledge of psycho- and neuro-linguistics, especially speech therapists for refining their methods of investigation of patients with language disorders. The description and analysis of a detailed investigation of lexical and sublexical processes make the book particularly useful for them. Neurologists may wish to familiarise themselves with a diagnostic approach they are unlikely to come across in any other of their research interests.

FC ROSE


The first edition of this book appeared in 1982, and the second edition appears, as did the first, under the auspices of the Paediatric Section of the American Association of Neurological Surgeons. It is a very important publication and deserves a place in every Neurological and Paediatric Department. The standard of production and illustration is very high, the format of two columns on each page makes for easy reading and handling, and its price of £93.75 represents extremely good value, especially in comparison with other recent neurological and neurosurgical texts.

The space devoted to each section is a reflection of the specialised fields in paediatric neurosurgery: developmental abnormalities 151 pages, hydrocephalus and intracranial hypertension 86, neoplasms 137, trauma 63, vascular diseases 23, and infections 15. Furthermore this distribution should underline the need for paediatric specialisation within neurosurgery, something which is still not accepted by all neurosurgeons in the UK.

For the specialist paediatric neurosurgeon, it should provide a useful ready reference to much of the literature, albeit with a heavy American slant. For the neurosurgeon who does not regard himself as specialised, it provides a very valuable, and often practical, guide to conditions which he may not treat very frequently. It may also persuade the “generalist” that his department would be better for having a more specialised member of the team. Nowhere is this more obvious than in the sections on congenital malformations and hydrocephalus. The book is especially recommended for the serious trainee in neurosurgery, whether or not specialisation in paediatric neurosurgery is planned. The sections dealing with developmental anatomy and pathophysiology should be read by all trainees and by those who purport to teach neurosurgery. This reviewer certainly became very aware of his own ignorance in many such fields, despite dealing habitually with some forms of congenital malformation.

In general each subject is adequately covered by brief historical review, (even Rasputin gets a mention in haemophilia) the developmental anatomy and pathophysiology, natural history and therapy. The book’s value is enhanced by much sound practical surgical sense, clearly written by those who have much experience, and who are used to facing the inevitable complications of much treatment. It is admirable that there is a chapter on the moral dilemmas in the management of children with some congenital abnormalities, although I had hoped that the author would be more courageous and express his personal views, including those upon the competence of surgeons in general to embark upon specialised procedures. The chapter dealing with the problem of stroke in children is excellent, and will provide a most valuable guide as much for paediatricians as for neurosurgeons.

But there are criticisms of this large and important book, and they arise mainly because of the multi-author nature of the work. There are 72 authors contributing to the 54 chapters, and it may be that authorship in this book provides some measure of recognition of specialist paediatric neurosurgery. However, this has led to repetition and overlapping in many of the chapters, especially in those on embryology, spinal dysraphism, CSF physiology, treatment of hydrocephalus, and management of intracranial tumours. Firmer editorial direction might have avoided this, and the text might have been shortened to advantage. Minor criticisms are the brevity of the section on infections, and the lack of the more “medical” rather than surgical conditions; and the absence of radiotherapy in the management of arteriovenous malformations.

Overall the book is essential reading and a ready reference volume for all neurosurgeons.