

**Pediatric Neurosurgery. Theoretic Principles and Art of Surgical Techniques.** By AJ Raimondi. (Pp 550; DM780.) Berlin: Springer Verlag, 1987.

This is an outstanding example of book production, for which author, artists, publisher and printer—and binder—are all to be congratulated. Among the 1,096 illustrations (of which one fifth are in well balanced colour), I found none that did not have a clear message or failed to give that message clearly. The quality of the illustrations is what impresses the reader at once.

The text is less easily praised. The author, well known for his firm views (based on a wealth of experience), makes little allowance for the opinions of others; the book might therefore mislead the tyro, who, as always, should turn to more than one teacher. There need be little hesitation in accepting the value of his surgical techniques, many of which he has developed himself. Reading the text soon makes it clear that the book's rather ambiguous subtitle "Theoretical Principles Art of Surgical Techniques" really refers to what interests the author most—the principles behind, and the methods of, surgical intervention, rather than providing guidance on the indications for surgery. Thus, for example, when and when not to operate on babies with myelomeningocele is not discussed. It can properly be argued that with such a wealth of detail about "how?", one should look elsewhere for "why?"

The "how?" ranges widely; in particular should be mentioned the splendid chapters (one each) on Positioning the patient for surgery (including draping and the microscope), Incisions, Cerebral Retraction, Hemostasis, Neuroanesthesia, and Intensive Care. The text and illustrations here show how well the author knows his subject and how well he conveys that knowledge to the reader.

Here and there are statements (usually unqualified) which cannot be accepted, of which one example is "The solid hemispherical tumors in childhood range from the extraordinarily vascular ependymoma and optic pathway glioma, . . ." (page 207).

I looked in vain for a note of acknowledgement to the artist, whose drawings are superb, and must conclude that draughtmanship is another of the author's accomplishments.

I highly commend this book to all who aspire to paediatric neurosurgery (as well as to those who believe they have achieved their aspirations)—but at the doubtless justifiable price of DM780, consultation by most readers will have to be in the library.

KENNETH TILL

**AIDS in the Nervous System** By R Lechtenberg, JH Sher. (Pp 141; £30.00.) Edinburgh: Churchill Livingstone, 1988.

This is a book written by a clinician and a neuropathologist aimed at helping "physicians to diagnose and manage the neurologic complications of AIDS and HIV infection". In addition, the authors wish to help those physicians to "understand the basic mechanisms underlying and associated with AIDS". After fair and informative introductory chapters dealing with basic aspects of immunodeficiency and the nervous system, the human immunodeficiency viruses and with epidemiology, there are chapters on neurological involvement, opportunist infections, tumours, neurological disease in infants and children and treatment and prevention. About 13 individual case histories are presented throughout the book but its substance is a short review of published data rather than an account of the experience of the authors. Perhaps as a consequence the picture drawn does not always seem balanced and the recommendations made, allegedly those where there is "consensus" within the scientific community, often fall short of this objective.

In many areas the statements made are either contentious or do not give a balanced appraisal of the clinical problems posed by AIDS. A number of examples follow. Whilst it is true that "controlling opportunist infections outside the CNS has not improved the outlook" of those with CNS disease (page 14) it should have been clearly stated also that controlling CNS opportunist infection does not improve the final outlook either. The statement (page 10) that without rapid and effective diagnosis and treatment patients with AIDS and nervous system disease invariably die is not false, but it is also true that even with such diagnosis and treatment they invariably die. It is not clear that HIV causes a myelitis (page 37) nor is it true that *Toxoplasma* retinitis is a common problem "associated with multiple neurological problems" (page 37). It is not generally accepted in the UK that patients with AIDS encephalopathy will require a brain biopsy to establish that the brain injury is not from an opportunist infection (page 40).

The review on management of cerebral toxoplasmosis attempts to present different opinions but the end result is rather confusing. The statement that "many physicians believe it would be wisest to biopsy any brain mass evident in an AIDS patient before initiating treatment" (page 72) seems to be accepted by the authors since this policy

appears in the flow diagram in the section on treatment (page 127). It is true that a therapeutic trial of suspected cerebral toxoplasmosis is reasonable if ring enhancing lesions on CT scan or MRI are not surgically accessible or is further justified if there is a 16 fold rise, or more, in toxoplasma IgG titre (page 72). However, the implication of this advice as well as of the view that medical treatment is to be performed in patients who have "already been biopsied for other brain lesions" to avoid "repeated neurosurgical procedures" seem to be that a cerebral biopsy is otherwise indicated in suspected cerebral toxoplasmosis. Few would now agree with such policy in the UK. There is a relatively long discussion on toxoplasma, antibody titres, which are of little use clinically, compared with the space allocated to CT scanning (page 69).

There are many points that should surprise the informed reader. There is a graph (page 91) on the expected recovery rate in progressive multifocal leucoencephalopathy if antiviral treatment is given—no treatment is known to be effective in this condition. It is not true that *common* pathogens for meningitis in AIDS patients include *E Coli* and *Treponema pallidum* (page 93). The section on peripheral neuropathies seems too short and uncritical. The evidence that there are "many cases of neuropathy caused by HIV itself" (page 53) is, at present, poor. It is not clear either how a rapid and thorough investigation may improve the long term outcome in AIDS (page 123).

The cases described are not always well chosen or representative. Seven female and six male cases are presented, a proportion far from the notorious current predominance of AIDS in homosexual males in western countries. In eight of the cases there was drug abuse, whilst homosexuality was the risk factor in one and blood transfusion in four. Two are children. The case history presented as an example of subacute encephalitis (page 39) is that of a woman who had biopsy proven non A non B chronic active hepatitis with a two week history and a clinical and laboratory picture indistinguishable from hepatic coma, some atrophy on CT scan and some focal white matter changes on MRI. She had changes of HIV encephalopathy and cerebral toxoplasmosis on a biopsy of the right temporal lobe but died shortly afterwards with a left hemiparesis and pneumonia. The relationship of these histological changes to the clinical presentation is far from evident.

The text is attractively presented and beautifully illustrated. It is unfortunate that the illustration chosen for the front cover

(longitudinal paraffin section of a nerve in "AIDS neuropathy" with trichrome stain) fails to demonstrate what the authors claim is "considerable loss of myelin". Errors which should be corrected are found here and there. In page 67 the text describes a case with a left temporal *Toxoplasma* granuloma but the corresponding figure shows a ring enhancing lesion in the right frontal lobe. Microglial nodules are not specific, as the authors state in the text, and not "typical of AIDS encephalopathy" as they state in figure 3.2.

Although a great deal of information has been adequately summarised by the authors and the illustrations and introductory chapters are generally clear and appealing, neurologists in training may not find enough depth in the clinical sections to make this a useful textbook. General physicians in the UK will find that part of the clinical advice given is at variance with the current practices of their neurological colleagues. The references are relatively comprehensive and up to date.

RJ GUILLOFF

**The Human Brain.** By Paul Glees. (Pp 204; £32.50.) Cambridge: Cambridge University Press, 1988.

This is a delightful overview of the nervous system by a distinguished neuroscientist who is perhaps best known as a neuroanatomist but who has also written widely on experimental neurology and neuropathology. The book deals with more than the human brain. The range of topics touched upon is immense, encompassing evolution and developmental embryology, neurohistology, regeneration, transmission, blood supply and CSF circulation, the hypothalamus and the special senses. It is a slim volume, packed with illustrations, most of them clearly drawn line-diagrams, and can be recommended as an introduction to the nervous system for the undifferentiated medical student embarking on neuroanatomy and histology or for those in paramedical disciplines where some insight into the structure and workings of the nervous system is desirable. The treatment is necessarily superficial though informed but the value of the book lies in the pictures not in the text. The first sentence is arresting: "For the last twenty years considerable interest has been directed towards brain research". In addition to many interesting historical references there are, scattered through the

text, little examples of the author's whimsical musings such as that found in a section on ageing and dementia where there is a paragraph on the problems of retirement. Elsewhere he warns of the dangers of disco-dancing. The book is clearly recommendable to the young.

LW DUCHEN

**Trauma Management. 2nd ed.** Edited by John F Burke, Robert J Boyd, Charles J McCabe. (Pp 648; £67.50.) London: Wolfe Medical, 1988.

The latest edition of this multi-author North American book provides a comprehensive overview of modern trauma management which is particularly directed at surgeons and others in training for the emerging speciality of Accident and Emergency Medicine. The book would also be of great value for general surgical and orthopaedic surgical trainees and is sufficiently clearly written to be a reference work for emergency medical technicians.

The strength of the book is the clarity with which the principles of trauma management are enunciated in the first few chapters and re-enunciated from the perspective of each of the different specialities involved in trauma care. In the latter half of the book dealing with trauma to the individual systems, the chapters progress from the general principles of management to specific details of each pattern of injury which commonly affects different organ systems, or long bones.

The book is particularly clear in describing the well-known pitfalls in trauma management (such as delayed rupture of the "bucket handle" descending aortic tear) diagnosed by the widened mediastinum on chest radiograph. The diagnostic patterns of each common trauma syndrome are thoroughly covered in the book, and this clearly reflects the enormous experience which the authors have over a wide range of penetrating and blunt trauma.

The book has two weaknesses: there is no chapter describing injuries to the eye, and the chapter describing head injury management is lacking in clarity in comparison with the other chapters of the book.

The head injury chapter does not discuss pathophysiology of brain damage after head injury, a necessary prerequisite for rational management. There are no references to diffuse axonal injury, or to the effects of brain injury upon cerebrovascular autoregulation. Failure of autoregulation is an important pre-disposing cause of second-

dary ischaemic neuronal damage in the multiple injured patient, and the management implications for trauma patients are considerable.

The authors do not include clear criteria for admission, CT scan or skull radiography for head injured patients, and the dangers of ambulance transfer of the unconscious head injured patient are not mentioned. Intracranial pressure monitoring is occasionally mentioned but criteria for its use are not mentioned. The head injury chapter is not specifically referenced in contrast to the rest of the book.

The chapter on spinal injuries covers both blunt and penetrating trauma very fully, and reflects the North American bias in favour of operative intervention for selected patients with bony instability and neurological signs.

This practical, up-to-date and comprehensive book is recommended for all clinicians with an interest in acute trauma.

ROSS BULLOCK

**Neurotrauma: Treatment, Rehabilitation and Related Issues—2.** Edited by Michael E Miner, Karen A Wagner. (Pp 194; £45.00.) Guildford: Butterworth, 1988.

This compact multi-author volume edited by a neurosurgeon and rehabilitation specialist represents the published proceedings of the 2nd Houston Conference on Neurotrauma. As its title suggests, it is not a comprehensive text, but rather a pot pourri of issues in head and spinal injury arranged in four sections. The first of these, on acute head injury management consists of a chapter on mild and moderate head injury which reviews data that were published some three years previously in another journal. There are two chapters on barbiturate therapy, one reviewing data which has also been published and the other discussing a trial still in progress without revealing the results. There is a chapter on facial fractures which makes the curious point that these injuries may protect the brain from severe damage because of the shock absorbing nature of the facial skeleton. Although 72% of these injuries result from road traffic accidents, the value of the wearing of seat belts is not mentioned once in this chapter.

The second section, dealing with recovery from head injuries, contains a short review by Sir John Eccles followed by chapters on the use of topical anaesthetics in the relief of spasticity, EMG in studying motor function, and the use of CT and MRI in assessing brain damage. The third section, devoted to the