scientific opinion without the whole machinery having to be reconstructed. For those of us currently involved in research using DSM-III, suddenly to be handed new tablets of stone out of a clear sky is rather depressing. Yet tablets of stone is what they are, if the impact of DSM-III is anything to go by. By the time this review appears, access to DSM-III-R will be mandatory to all those with an interest in psychiatric research. All medical school libraries should own a reference copy of the complete manual. I would steer individuals towards the pocket-sized ring-bound desk reference.

SW LEWIS

Neuroanatomy. An Atlas of Structure, Sections and Systems. 2nd ed. By Duane E Haines (Pp 256; £19.00.) New York: Urban & Schwarzenberg. UK Distrib: Williams & Wilkins, 1987.

Professor Haines' atlas is a large spiral bound paperback, intended mainly for undergraduate and postgraduate students. Three chapters cover the gross anatomy of the brain, including dissection of the interior, and unstained coronal and transverse sections, tilted in the CT plane. Chapter 5 begins an atlas of stained sections extending from the spinal cord, through the brain stem to the diencephalon and basal ganglia, and the book concludes with diagrams of the main nerve pathways.

Of the chapters added to this edition, the third, covering internal dissections of the brain, is essential if the atlas is to accompany practical classes. An enlargement of the central area of fig 3.6, showing the geniculate bodies would be an advantage. The figures in chapter 6, also new, are particularly clear and crisp, but the invitation to correlate horizontal and vertical sections of the diencephalon will appeal to few undergraduates. Chapter 8, in which magnetic resonance images have been added to a short CT and angiography atlas, is a timely reminder that these methods have been the most dramatic advance in applied neuroanatomy this century.

The atlas is accurate, comprehensive and modern. The spinothalamic tracts are grouped into one "anterolateral system" in the modern idiom. The corticospinal fibres are placed well back in the posterior limb of the internal capsule, as recent clinical research suggests, and terminate appropriately in laminae V-IX. The ventral spinocerebellar tract takes origin, as Hongchia

showed so elegantly, from the posterior part of the anterior grey column. The avant garde will find the limbic lobe, the area postrema and the septal nuclei, and the postgraduate, the Edinger Westphal nucleus and the pretectal area of interest. Woollam's important work of the surgical significance of the paraventricular organs has not, however, ensured their inclusion.

There are some personal gripes. There are no simple diagrams of the whole brain to help students sort out its main parts on the first day. In the same way the morphological and functional anatomy of the cerebellum is entirely lost in a welter of controversial names and fissures. All atlases of this type would be so much more useful in the practical room if labelling was built up progressively, so that the earlier drawings identified the major divisions, and the later ones concentrated on local topographical detail. The distribution of the cerebral vessels is comprehensively covered, but there are no dissections of the vessels themselves. The transverse temporal gyri are well shown in fig 3.1, but the striking differences of left and right are ignored—one of the few sites at which there is regular anatomical evidence of cortical asymmetry. Turning to the section atlas, only one half of each level is shown, the opposite half being a labelled tracing. This though a common practice is not successful, and destroys the natural symmetry of the level. In any event diagrams of the same side as the photograph would make finding structures infinitely easier. Students will find the outlines of some of the nuclei impossible to relate to the structures illustrated (for example, the nucleus ambiguus in fig 5.8). This is exactly how faith is broken in the practical room, and could have been avoided by using sections in which the cell bodies are stained, as we do in class practicals in Glasgow. However, the sceptical or rebellious undergraduate, who, like some of his mentors, wonders how "tract" outlines are plotted where no tracts seem to exist, or how diagrams of "connexions" are built up will find some consolation in the excellent and thoroughly modern bibliography.

The need for a good "traditional" neuroanatomical atlas, such as this, is unquestionable: the queues which form round labelled specimens in our own museum bear witness to this. The problem remains that neuroanatomy courses for medical students nowadays will rarely exceed 40 hours in total, and many are perfunctory or non-existent. For the £19 which this atlas would cost, the average undergraduate could buy an excellent primer which would cover all

his theory and include a summary atlas as well. Teachers, however, and especially those who have struggled with real brainstem sections, will find this an excellent and reliable supplement to an old Ranson, and superior to many other comparable atlases.

Sydenham wrote of the brain that "no intelligent contemplation of its structure will tell us how so coarse a substance . . . shall subserve so noble an end". In many ways this is still true, but read with insight, the thrill of modern neuroanatomy is here. And for the real neuroanatomist, leafing through Haines has all the fascination, charm and romance of leafing through an atlas of the world.

JOHN SHAW DUNN

Regulation of Cerebral Blood Flow and Metabolism: Neurosurgical Treatment of Epilepsy: Rehabilitation in Neurosurgery. (*Advances in Neurosurgery Vol 15.*) Edited by R Willenweber, M Klinger, M Brock. (Pp 329; DM 120.00.) Berlin: Springer-Verlag, 1987.

This volume carries the abstracts of the papers read at the 37th Annual Meeting of the German Neurosurgical Society held in 1986. Three main topics were under discussion, namely regulation of cerebral blood flow and metabolism, neurosurgical treatment of epilepsy, and rehabilitation in neurosurgery.

The individual abstracts, unfortunately, are very variable. Some are too brief to be of any real value and others are simply a review of current approaches with no new information. Those papers in which some details of methodology and results are given are of interest but even in these their brevity detracts from their real value.

I found the critical biography of Otto Foerster by Professor Zulch of great interest and would recommend it to be read. Of the three topics under discussion the one on epilepsy is the most coherent and to those surgeons involved in this field worth reading. In particular the small series of patients evaluated with the PET scanner indicated a significant application of this technique in temporal lobe epilepsy. The article on the micro-anatomy of the anterior choroidal artery system is very useful if a selective amygdalo-hippocampectomy is to be recommended as the procedure of choice in a specific case.

The section on cerebral blood flow and metabolism covers a wide area with some papers of interest and some new observa-

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vations. The three experimental papers on oxygen metabolism and microcirculation in rats, the physiology of experimental brain infarction and the paper on nimodipine on cerebral blood flow are all of interest; they contain some new observations and the techniques are worthwhile pursuing further. The final section on rehabilitation is the least satisfactory and suffers most from the variability of the abstracts presented. There are no significant new techniques and advances in this group of papers.

If congress reports are to be regarded as definitive information to be subsequently used for reference purposes then a much stricter editorial policy is needed than is evident in this volume. However, if the object is simply to record the presentations for those attending the Congress then wider publication is clearly unnecessary. This volume falls between these two categories. A few papers are really worthwhile but most cannot be considered in the format in which they are presented. I would not recommend this volume for purchase at the price it is being offered, and in comparison with the previous series from the same Society it falls somewhat short of the high standards evident in previous Congresses.

I JACOBSON

Aging of the Brain and Alzheimer's Disease. (*Progress in Brain Research Vol 70.*) Edited by DF Swaab, E Fliers, M Mirmiran, WA Van Gool, F Van Haaren. (Pp 525; \$169.00.) Amsterdam: Elsevier Science Publishers, 1986.

This 70th volume of the *Progress in Brain Research* series contains the proceedings of the 14th International Summer School of Brain Research in Amsterdam in August 1986, and published over a year later. Since that time the research in this area has advanced considerably and particularly the molecular biology both of the putative familial Alzheimer's disease gene located to chromosome 21 and also the elucidation of amyloid. The precursor of the amyloid deposited both within blood vessels and the centre of the senile plaque in Alzheimer's disease has been elucidated, probes developed and the gene also located to chromosome 21. In the light of these important advances what can this book offer?

The main strength is that it presents a collection of reviews rather than simple research abstracts although there is clear variation in the general style. In general the

authors have followed the instructions of the editors to review their subject and to relate clinical features to experimental animal data. Despite the recent advances the problems covered remain central to the area of Alzheimer's disease and ageing. Chapters address the question of the role of the cholinergic abnormality and of aluminium both of which are still unresolved. Perhaps the most challenging of all is the relationship between so-called "normal ageing" in Alzheimer's disease and whether cerebral ageing should be considered as a normal biological or pathological phenomenon. In this regard there is a short review by Terry on the pathology of the ageing brain which is helpful and there is also an excellent review by Frackowiak on cerebral imaging and dementia. Also notable is the chapter by Professor Van Crevel on the clinical approach to dementia. This is the first chapter and provides an excellent introduction to the subsequent less clinical papers. The discussion of how treatable are the treatable dementias and how far one should investigate for what may be a very small return contrasts with the optimism of the scientific data. The clinical caution which is exercised in relation to cerebral biopsies will change if significant benefit can be demonstrated for the patients. Until that time this book remains a good source of overall review although it is unfortunately a very expensive introduction to the subject.

M ROSSOR

Advances in Headache Research. Current Problems in Neurology 4. Edited by F Clifford Rose. (Pp 280; £28.00) London: John Libbey & Co Ltd, 1987.

The growing interest in migraine is reflected in the presence of 500 symposiasts present at the biennial meeting and in the accompanying mini-symposia and satellite meetings of the International Headache Society and World Federation of Neurology Migraine and Headache Research Group. The organisation and prompt publication of the proceedings do credit to the experienced editor Frank Rose.

The publication spans 278 pages and 41 papers. It is divided into five sections. The first three deal with migraine pathogenesis, vascular aspects and therapeutics; the fourth concentrates on cluster headache and the fifth with other types of "idiopathic headache." The contents inevitably vary in approach and value, ranging from a simple

textbook type of survey of beta-blockers, through clinical trials of diclofenac, nasal dihydroergotamine to scientific studies of asymmetries of blood flow (Levine, Welch *et al*) and critical hypotheses of for example sensory connections of cephalic vessels (Moskowitz; Edvinsson *et al*). Platelet and basophil studies are described, peptides, dietary tyramine and wine are updated and fluid retention, menstrual and endocrine investigations are still unresolved enigmas.

Newer techniques of single photon emission tomography provide useful information non-invasively, and spectral analysis and topographic mapping (Schoenen, Jammaer and Delwaide) show interesting unilateral EES changes even in common migraine. It is pleasing to learn how much more data are accumulating, but its very diversity confirms the neurologist's traditional view of migraine as a disorder of function with protean expression and multifactorial aetiologies. Thus, a unified explanation, or a series of identifiable mechanisms leading to rational treatment still evade us.

This book is packed with useful data. It is warmly recommended as a vital source of references for the migraine research worker. The clinician too, will be able to familiarise himself with all that's new in the migraine world.

JMS PEARCE

Surgery of the Third Ventricle. Edited by Michael LJ Apuzzo. (Pp 872; £149.00.) London: Williams & Wilkins, 1987.

This is an excellent book and should be an essential requirement for any library of a neurosciences department, for although principally for surgeons in that there is a sizeable proportion of the book devoted to operative technique, there is information that would be invaluable to neurologists, neuropsychologists, neurophysiologists, neuro-radiologists and those involved with neurooncology.

From a surgical point of view the chapters on the operative approaches to the third ventricle and its surrounding anatomy are outstanding. The text, diagrams and photographs are all extremely clear and of good quality, and although there is inevitably some overlap, this is very much to the benefit of the reader. It is also of note that the difficulties and problems associated with the various approaches are given mention. Although the information in many of the