the chapter on "The Advantages and Disadvantages of X-ray Computerised Tomography" particularly as it is separated from and not compared with the benefits and problems of MRI.

As an introduction to MRI for those with no experience, this is a useful book and the simple explanations may well be of use to others who although understanding the subject in general find it difficult to conceive some of the basic principles. It would therefore be of considerable use to physicians and surgeons commencing their study of the subject and also to the paramedical sciences who need a basic explanation of this very complex technology.

DPE KINGSLEY

Cerebral Ischemia and Hemorrheology. Edited by A Hartmann, W Kutschinsky. (Pp 530; DM 188.00.) Berlin: Springer-Verlag, 1987.

International conferences abound and it has become commonplace to follow them with publications providing edited accounts of proceedings. The results vary enormously in scientific quality and all suffer from limitations intrinsic to the genre. These include repetition by different authors within the same book and the same authors within different books (there is simply not enough pressure to be original at international conferences). Many of the contributions would not see the light of day in peer reviewed journals. So conference proceedings do not make easy reading and with 60 chapters from over 200 authors *Cerebral ischaemia and Haemorrheology* is no exception. Is it worth buying?

Regretably, given the exchange rate, the answer is yes. The editors and publishers are to be congratulated on producing a useful book with a reasonable index within such a short space of time (the conference took place in June 1987). The contributions are copiously referenced with contemporary citations. Most of the important groups currently working in the contentious field of blood fluidity and stroke propensity are represented. Opinions differ as to the causal significance of elevated blood viscosity in stroke and, as might be expected, a collection such as this tends to preach to the converted.

The first three chapters (Kutschinsky, Edvinsson, Schmid-Schonbein) are the best. They are review articles on the control of the cerebral circulation and the potential role of hemorrheological disturbances in cerebral

infarction. Schmid-Schonbein concludes that "if one were to argue from the standpoint of conventional haemodynamics and oxygen delivery, there would really be no reason for proposing therapeutic hemodilution" but his caution is not shared by the majority of subsequent contributors, many of whom include within their short "journal-format" papers testaments of haemorrheological faith. A study on heparin, DVT and acute stroke concludes that treatment is mandatory in patients with paralysed limbs, despite an earlier disclaimer that comparisons between study groups were not possible because of low numbers. There is a general tendency to equate increased CBF with improved CBF, an error which inescapably leads to unqualified support for the hypothesis that haemodilution improves outcome in acute stroke. But the hypothesis has been somewhat dented by two studies, one published here (the Scandinavian Stroke Study Group) and one elsewhere (Italian Haemodilution Study Group). Both were large randomised studies and both failed to demonstrate improved outcome after isovolaemic haemodilution with low molecular weight dextran. Undaunted, the enthusiastic rheologists have now suggested hypervolaemic (to improve cardiac output) haemodilution with hydroxyethyl starch (it reduces plasma viscosity as well as lowering the haematocrit). Whether they are prepared to test their hypothesis within the context of another randomised trial of sufficient size remains to be seen.

Haemorrheology has some way to go before it can claim comparable status to the more established clinical sciences such as immunology. At present it is by no means certain what proportion of cerebral vascular events are precipitated or made worse by abnormalities of blood fluidity. New theories tend to be over inclusive, particularly when applied to conditions as apparently random and devastating as stroke, and so we should excuse many of the book's excesses. Even at around £60.00, I would strongly recommend this book to anyone contemplating or undertaking research on the rheological aspects of cerebrovascular disease.

JOHN WADE

Wolff's Headache and Other Head Pain 5th ed. Edited by Donald J Dalessio. (Pp 434; £50.00.) Oxford: Oxford University Press, 1987.

My initial reaction to this book was one of delight at its ideal size, shape and length.

The editor is to be congratulated on resisting the trend for successive editions of classic works to be longer than their predecessors; the fifth edition is slightly shorter than the fourth, which is a full 300 pages shorter than the third. The type and page format are also clearer in the current edition.

The book in some ways remains an ideal reference work on the subject of headache in that, as its full title implies, it covers the whole range of causes of head pains, in contrast to certain other headache text books which concentrate disproportionately on migraine. The basic content of this edition has changed little with the exception of chronic paroxysmal hemicrania which has gained promotion from one paragraph to a short chapter.

It is now over 50 years since Wolff carried out many of his famous clinical studies attempting to establish the underlying basis of different types of headache. This book understandably still includes many of these studies with familiar diagrams such as those showing the sites of referred pain when various intra and extracranial structures are stimulated. It is however disappointing that a new approach to the presentation of this material has not been attempted. Surely his memory would be well served by an opening series of chapters reviewing the history of headache research this century rather than making so many chapters top heavy with long historical preambles.

There are some excellent individual chapters in this edition; Lance writing on the pathogenesis of migraine elegantly summarises the changes in blood flow, platelets and vasoactive agents which occur during migraine attacks. Kudrow offers clear guidelines on the management of cluster headaches. The chapter on toxic vascular headaches brings together a wide range of different types of headache including hunger, exertional, orgasmic, altitude, decompression and ice cream headaches with useful resumés of each. As in previous editions there are useful sections on ocular, dental and nasal causes of facial pain.

Like all multiauthor works this book has its fair share of duplicated material. Cervicogenic headaches, depression in tension headache patients and giant cell arteritis appear in two different chapters, whilst the comments on mountain sickness are repeated on adjacent pages. The term "post-herpetic trigeminal neuralgia" should never have appeared in print; it is bound to cause confusion. I remain to be convinced that the chapter on the radiological investigation of headaches (an addition only found in the latest two editions) is of much value in its present form. Apart from showing some pic-

tures of brain tumours, haematomas and aneurysms, it does not assess any specifically headache-related radiological problems. Similar chapters in competing books have discussed the indications for CT scans in headache patients and the radiological findings in migraine.

This book, despite its shortcomings, contains a great deal of useful information, it is clearly presented with summaries at the end of each chapter, and is generally well referenced.

I hope the sixth edition contains far more radical changes. In the meantime this volume remains one of the standard works on headache. It will mainly be used by neurologists but also by ophthalmologists and general practitioners. It is a sad reflection on current medical textbook prices that £50 no longer seems exorbitant for standard reference works.

F SCHON

Cranial Nerves: Anatomy and Clinical Comments. By Linda Wilson-Pauwels, Elizabeth Jakesson and Patricia A Stewart. (Pp 177; £19.00.) Oxford: Blackwell Scientific, 1988.

This book on the anatomy of the cranial nerves has been written by three anatomists and is designed for the student studying neuroanatomy for the first time. The book goes through each cranial nerve in turn and describes the anatomy including connections within the brain in a series of very clear drawings. The components of the nerves are colour coded so that their functional components can be easily recognised. Different colours for the pathways for special sensory, general sensory and visceral sensory functions are used and visceral motor, branchial motor and somatic motor are clearly shown similarly. The drawings, made by the first author, are very clear and the colour coding is very helpful in following the complicated connections of a nerve such as the facial nerve with its multiple components and complicated connections. The book is I believe designed mainly for those studying anatomy and though there are some clinical comments, these are rather brief and not always entirely accurate. Thus, the commonest aneurysm by far to produce a third nerve palsy would be one arising from the internal carotid artery, and a facial palsy would not be a common presentation of an acoustic neuroma. Given that the book is mainly directed towards students of anatomy the clinical information it gives is probably adequate but I think that the value

of the book goes beyond its use to medical students. I feel it could be of considerable value to neurologists and neurosurgeons who would find the clear drawings very useful for quick reference and verification of detailed anatomy learnt long ago. On that basis the book can be recommended warmly to clinicians and it is to be hoped that some additional clinical input into the next edition might make the book of even more value.

RD ILLINGWORTH

Primary and Secondary Brain Stem Lesions. (Acta Neurochirurgica Suppl. 40.) By Gyorgy Csecsei, Oskar Hoffmann, Norfrid Klug, Albrecht Laun, Robert Schonmayr, Jan Zierski. (Pp 130; DM 165.00.) Vienna: Springer-Verlag, 1988.

This 130 page book is supplement 40 of *Acta Neurochirurgica*. It is composed of six chapters which are loosely collated; all contributions are from the Neurosurgical Department of Giessen University. As stated in the foreword, the *raison d'être* for this supplement is that it was requested by the late director of the neurosurgical department in Giessen (Professor HW Pia) and is therefore dedicated to him.

The format of the book is very similar to *Advances and Technical Standards in Neurosurgery*. The quality of printing, photography and line drawing reproduction is consistent with Springer's usual high standard, although several tables and graphs have been published direct from inferior quality computer graphics.

The first two chapters (Schonmayr) concern effacement of the CSF cisterns with supratentorial and infratentorial mass lesions and clinical deficits associated with primary and secondary brain stem lesions. Both are descriptive and present a voluminous data that has little direct clinical relevance. In particular the latter chapter presents a mass of uninterpretable data concerning loss of brain stem reflexes. The cohort studied covers a heterogeneous group of neurosurgical patients who are studied with no reference to aetiology of the lesion, initial Glasgow coma score or Glasgow outcome scale. There is also no mention of the Liege coma score which has been found to be highly useful, and its contribution to the assessment of patients with severe head injury and brain stem insults. The third chapter again presents a mass of clinicoradiological data entitled "Acute Direct and Indirect Lesions of the Brain Stem — CT

Findings and Their Clinical Evaluation". Like the preceding chapters this is particularly difficult to evaluate, more so since the aim of the study is not stated. In view of the poor imaging of the brain stem with CT compared with MRI, characterisation of the lesions in the brain stem is extremely limited. The contribution of electrically elicited blink reflexes and brain stem auditory evoked potentials to clinical evaluation of patients with rhombo-encephalic lesions is presented in chapter 4. The authors conclude that these evoked potentials can provide useful information in brain stem but not cerebellar lesions. They also include an experimental study in cats evaluating the effects of raised intracranial pressure on the blink reflex. Despite presenting a well illustrated study, this chapter again suffers from being overwieldy and difficult to follow. An experimental study of changes in cerebral blood flow in various brain structures caused by raised intracranial pressure due either to inflation of an intracranial balloon or mock CSF infusion in cats, follows. This is a concise study that examines the effects of cerebral perfusion pressure and compartmentalisation of cerebral blood flow that occurs with raised intracranial pressure. No consistent changes in cerebral blood flow occurred with ICP less than 40 mm of mercury. At ICPs in the 40 to 60 mm range differential global and local changes in blood flow occurred. However, brain stem blood flow was preserved despite very high ICPs. The final chapter describes a biomathematical model of CSF dynamics and haemodynamics which to the non-mathematician will be extremely perplexing.

Overall this tome is disappointing. The burdensome language contributes to difficulties in comprehension of often confusing and voluminous data. Other than having excellent references (often to the neglected Franco-Germanic neurosurgical literature), there is little to recommend this poorly edited book. Byron (1809) wrote "Tis pleasant sure to see one's name in print". However, I do not think Professor Pia would be happy with this text which is dedicated to him.

IR WHITTLE

Psychiatric Aspects of Headache. Edited by Charles S Adler, Sheila Morrissey Adler, Russell C Packard. (Pp 387; £44.00.) London: Williams & Wilkins, 1987.

This is at first glance a comprehensive and well structured book devoted to an area that