

Section 6 describes interictal studies of migraine with aura, while part 7 is concerned with interictal studies of migraine without aura. Techniques involved are SPECT and measurement of cerebral blood flow.

Part 8 is devoted to transcranial doppler studies in migraine starting with a chapter by Rune Aaslid the inventor of transcranial doppler technique.

Part 9 concerns cluster headaches, studies with HMPAO technetium are described as well as conventional cerebral blood flow studies and transcranial doppler ultrasonography.

Finally, there is a section concerning other types of headache as well as the effects of drugs such as Sumatriptan and Ergotamine on cerebral blood flow.

What is one to make of such a volume? It is an encyclopedic collection of almost every study of cerebral vascular mechanisms in migraine and other headaches. It contains sections of variable quality but overall the general standard of the book is excellent. The editor is to be highly commended for his ability to synthesize the different findings and for adding at the end of each section a summary trying to bring together all the frequently disparate finds. This book is essential for anybody interested in both basic and clinical research in the area of headache and it demonstrates the coming of age of migraine research.

*M.J. Gawel  
Toronto, Ontario*

**INTRACEREBRAL HEMATOMAS.** First Edition. 1992. Edited by Howard H. Kaufman. Published by Raven Press. 240 pages. \$144 Cdn. approx.

This book is, for the most part, a collection of reviews of topics related to cerebral hemorrhage by various experts. As expected, the individual chapters are of uneven scholarship and usefulness. Little is novel and most of the information can be obtained elsewhere either from the original articles on which the reviews are based, or in current, standard textbooks of neurology and neurosurgery where most of the topics are also addressed. The volume of the book is, therefore, to collate this material within two hard covers. There is a discussion of the incidence of stroke and the relative incidence of intracerebral hemorrhage, and of the risk factors of the latter, focusing mainly on arterial hypertension. There is a very useful review of various animal models of intracerebral hemorrhage with succinct discussions of the methodology and results from individual studies. There is a short review of the inter-relationship of the brain and blood pressure. Most useful are an extensive and expert discussion of the clinical features of intercerebral hemorrhage; and an extensive and extremely well illustrated chapter on the radiological aspects of cerebral hematomas. Infectious aneurysms are succinctly addressed, as are intracerebral hematomas associated with brain tumours. Special attention is given to pituitary lesions and pituitary apoplexy in a well illustrated chapter. The large literature on intracranial hemorrhage during pregnancy is well reviewed. Especially timely is the discussion of drug-induced intracerebral hemorrhage; and there is an interesting discussion of intracerebral hematomas in childhood. Treatment, especially of hypertensive hemorrhage, in the North-American context, is neglected, a major deficiency of the book that detracts significantly from its usefulness. There is a

discussion of stereotactic aspiration of cerebral hematomas, with or without fibrinolysis, and an extensive discussion of treatment attitudes in Japan where a large experience has been gathered. Other topics are also addressed. One would wish for a more complete discussion on pathological changes and physiological aspects of hypertensive cerebrovascular disease, and a more extensive discussion of amyloid angiopathy.

This book will be useful to medical students rotating on neurology or neurosurgery and to residents preparing fellowship examinations.

*Richard Leblanc  
Montreal, Quebec*

**CLINICAL BRAIN IMAGING: PRINCIPALS AND APPLICATIONS.** First Edition. 1992. Edited by John C. Mazziotta and Sid Gilman. Published by F.A. Davis Company. 480 pages. \$144 Cdn. approx.

This book is intended for physicians in training and practicing clinicians, the objective is to provide an up-to-date review of "CT-based techniques". The first few chapters deal with physics, the remainder with clinical application of various imaging techniques.

Basic principles and physics of CT, MRI, PET and SPECT are covered in first four chapters. The chapter on CT contains a lot of material on high dose/delayed high dose and dynamic enhanced CT techniques which find little application in current practice. The chapter of MRI seems quite old, with disproportionate discussion of permanent and resistive magnets and little on superconductive magnets which certainly represent the state of the art. The images presented are poor quality and obviously out-dated. The preface states that these chapters are written in language "that should be understood by all physicians". The intended audience of this book will probably not find this to be the case, particularly the lengthy discussion of tracer kinetic modelling.

The remainder of the book deals with clinical applications of neuroimaging techniques. The chapters are broken down by disease categories e.g., epilepsy, neoplastic disorders etc. Throughout these chapters, there is a very heavy emphasis on functional neuroimaging, particularly PET and SPECT. The MR images tend to be of poor quality throughout these chapters, excluding the chapter on white matter disease.

While it is a very difficult task to write a book on neuroimaging which is truly up-to-date by the time it is published, this book contains material which is clearly out-dated. It fails to reflect the current central role of magnetic resonance imaging. In general, practicing clinicians will not find this to be a useful addition to their library. This volume will appeal to those who have special interest in functional neuroimaging, particularly PET and SPECT.

*Robert J. Sevick  
Calgary, Alberta*

**NEUROTOXICOLOGY.** 1992. Edited by Hugh A. Tilson and Clifford L. Mitchell. Published by Raven Press, New York. 400 pages. \$130 Cdn. approx.

This book is not a text describing neurologic or psychiatric disorders that result from exposure to toxins under the usual headings of incidence, etiology, pathogenesis, clinical features,