

rather limited in number, but are carefully chosen and of satisfactory quality. The chapter on immunocytochemistry of neurotransmitters could have been better illustrated and the line drawings are done freehand by the author rather than by a professional scientific illustrator, but they make their points nevertheless.

This volume is useful to investigators in the field and to comparative neuroembryologists, and I do not hesitate to recommend it to this restricted audience. Paediatric neurologists, neurosurgeons, and neuropathologists will find little direct correlation with clinical problems including even spinal dysraphism, but might enjoy perusing portions of it in their library because it does impart an understanding of early events of neural development that relate to disorders of early ontogenesis of the human nervous system.

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**MEMORY DISORDERS IN CLINICAL PRACTICE.** By Narinder Kapur. Published by Butterworths. 289 pages. \$63Cdn approx.

Given the ubiquity of memory disorder in everyday neurological practice, it is surprising that no-one has previously attempted to summarize in one monograph the distinctive features of memory disorders in patients with different brain diseases. Such information is available in separate monographs on head injury or dementia or Korsakoff's disease, but this volume brings together current information on the assessment of memory in specific clinical conditions and the memory profile in different neurological diseases. The author provides a useful introductory chapter on methods of memory assessment including specific tests of verbal and non-verbal memory function. There is brief discussion of implicit memory tasks and retrograde amnesia tests and a description of memory test batteries in current use, such as the Wechsler Memory Scale, the Rivermead Behavioural Memory Test, and the Williams Memory Battery. In the appendices, he also provides sources of materials which may be of use in designing memory tests and in the remediation of memory disorders.

The author describes the memory impairments associated with specific diseases, including chapters on cerebrovascular disease, cerebral tumours, penetrating and blunt head injury, degenerative, demyelinating and hydrocephalic dementias, infections and metabolic diseases, toxic and deficiency states, epilepsy, and cerebral ablations. Each chapter reviews the memory profile as currently known for these disease processes. The summaries on the anterograde and retrograde memory deficits occurring after cerebral trauma are succinct and comprehensive. The author confines his discussion to traditional clinical neuropsychological memory assessment. He does not discuss information processing theories of memory or the experimental neuropsychological literature on memory, for example, Baddeley's research on working memory, or recent reports on semantic memory impairments in Alzheimer's disease. An important short-coming in the chapter on infectious diseases is the omission of any discussion of HIV dementia, which is now the commonest cause of presenile dementia in the United States.

Overall, this is a useful text addressed both to the practicing neurologist or neurosurgeon as well as to the neuropsychologist. It has a comprehensive reference list and encompasses a wide

range of neurological diseases. It is well-written and generally avoids jargon. It fills a gap in the neurological and neuropsychological literature providing a practical guide to the memory deficits encountered in everyday clinical practice. The book would be profitable reading for residents in training as well as experienced practitioners.

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**IMPACT OF FUNCTIONAL IMAGING IN NEUROLOGY AND PSYCHIATRY SERIES: CURRENT PROBLEMS IN NEUROLOGY: 5.** Edited by J. Wade, S. Knezevic, V.A. Maximilian, Z. Mubrin, I. Prohivnik. Published by John Libbey & Company. 208 pages. \$58Cdn approx.

This volume contains the proceedings of the Second rCBF Workshop held at Supetar/Brac, Yugoslavia in the Fall of 1986. In fact, most of the discussion relates to the impact of functional imaging in neurology and there is little comment on its use in psychiatric disorders.

The major functional imaging modalities are all included, although the emphasis is quite appropriately given to positron emission tomography (PET) and to single photon emission computed tomography (SPECT). An excellent review of all aspects of PET, ranging from the physics through tracer methodology, to a summary of clinical studies is provided in the chapter by Wise. The chapter by E11 and co-workers provides a useful summary of the types of studies possible with SPECT. Other imaging modalities discussed include stable xenon/CT imaging of cerebral blood flow, and two dimensional imaging of rCBF with xenon 133. Cortical electrophysiological mapping is mentioned briefly with regard to epilepsy. An interesting chapter by Peterson discusses the potential role of NMR in imaging flow, perfusion, and diffusion. Of these measurements perfusion is probably the most important from a functional imaging viewpoint; unfortunately Peterson feels that "perfusion still constitutes a mostly unsolved problem".

While perusing this volume one is struck by some unevenness in presentation. While some chapters such as the one by Wise provide a reasonably complete but brief review of an entire field, other chapters concentrate on much more restricted subjects such as "controversial aspects of brain imaging of migraine" and "remote metabolic effects of stroke". A number of the disease oriented chapters have successfully attempted to compare the different of functional imaging modalities with each other. Most notable chapters in this regard are related to aging by Fieschi et al and to Alzheimer's disease by Smith and Prohivnik.

There is a certain amount of redundancy and repetition in some sections but this is difficult to avoid in a volume of this nature. The individual chapters for the most part are high quality although the work itself would benefit from stricter organization, for example into a section concerning methodology and a section concerning clinical studies. In spite of its short comings this is one of the few volumes available which attempts to discuss the advantages and disadvantages of these complex methodologies and as such deserves the attention of the neurologist or neurosurgeon interested in functional imaging.

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