
This is the sixth volume in a series of reviews under the general editorship of Dr Krayerbühl. As in the previous volumes, it is divided into an initial section on “Advances” and a second section on “Technical Standards”. In this volume the “Technical Standards” section will perhaps be of greater interest to the ordinary neurosurgeon.

In the “Advances” section, the first article is a paper on “Stereotactic Radiosurgery in Intracranial Tumours and Vascular Malformations” by EO Backlund from The Karolinska Hospital, Stockholm. This is a most interesting article about what is undoubtedly a promising advance in the application of stereotactic techniques to radiotherapy. This form of treatment is undoubtedly effective even with such radioresistant tumours as acoustic schwannomas. However the equipment required appears to be complex and is undoubtedly expensive. One cannot foresee its general adoption, but this form of treatment will perhaps find a place in a few highly specialised centres.

The second article is a straightforward review of the problems posed by “Infections in Neurosurgery”, by Drs Klastersky, Kahn-Coppens and Brihaye. Although there is little here that could be truly described as an “advance” nevertheless it is a useful review and will no doubt be a salutary corrective to the antibiotic prescribing habits of many of us.

The third article in this section, on “Spasticity—Clinical Classification and Surgical Treatment” by Dr C Gros of the Centre Hospitalier Universitaire, Montpellier, France, is a lengthy review of the currently available treatments for spasticity. Although it is comprehensive, in some parts the English is difficult to understand, and there is no mention of the efficacy or otherwise of chronic cerebellar stimulation in the treatment of spasticity or the dystonias.

In the technical section, Drs Derome and Guiot have presented an excellent and detailed review of the different surgical approaches to the sphenoidal and clival areas, together with the advantages and disadvantages of each. This is the ideal type of article for this section and the authors have made a notable contribution to “Technical Standards”.

The review by Professor Braakman on “Cervical Spondylotic Myelopathy”, is likewise excellent and the author conveys a balanced view on the respective place of the anterior and the posterior operations in the treatment of cervical myelopathy.

The last article, on “Tumours of the posterior part of the Third Ventricle” by Dr F Ismat, Hospital de Llobregat, Barcelona, is a timely review on the neurosurgical management of tumours of this inaccessible area. It gives a coherent account of the various neurosurgical and radiotherapeutic options available and the criteria which govern their selection.

In summary, volume six in the series is well up to the standard of its predecessors and, like them, should find a place in the departmental library.

DG HARDY

Sensory Processing in the Brain By Dean E Wooldridge (pp 371; £15.25.) John Wiley & Sons Ltd, Chichester, 1979.

This is a remarkably lucid account of one engineer’s enormously ambitious effort to devise a lifelike model of the parts of the brain that process sensory data. The author begins at the cellular level, describing the desired neurone types, shows how they can form the necessary sub-assemblies, and then proceeds to build models of the various sensory processors in turn, beginning with the simplest (smell and taste) and proceeding via hearing and somaesthesia to the most elaborate processor (vision), which occupies the second half of the book. The reader is thus familiarised with the properties of these subassemblies in a relatively simple context at first, and the author achieves a certain unity of modelling approach between the various sensory systems.

Where relevant, the author recalls the available anatomical, neurophysiological and psychophysical facts, so that the structure and capabilities of the model do not diverge too far from what is known of the reality. He also bears in mind the need to generate an end product that can be readily stored by plausible memory mechanisms.

Any speculative edifice of this sort is sure to contain errors and likely to be largely wrong; but it is difficult to resist the arguments that lead for example to the requirement for a high-base digital code for encoding various sensory stimulus parameters; and the requirement for timing circuits in the control of many aspects of sensory processing.

The book will leave sensory neurophysiologists with plenty of suggestions as to what to look for in the brain, both as to the neural sub-assemblies that may be present and identifiable, and as to what they may do and the ways in which they may be controlled.

DAVID RUSHTON


Stereotaxic techniques for making small lesions, or placing injection canulae in rodents originally were devised for the rat, but refinement of methods and expense have led to increasing use of mice for behavioural, pharmacological and physiological investigations. Unfortunately, apart from the publication of Slotnick and Esman (1964, Amer. Zool., 4, 344) and of Montemurro and Dukelow (1972) (whose atlas of the mouse diencephalon was published by Futura Publishing Co.) there has not been a good stereotaxic atlas of the mouse brain, so this volume fills a much-needed gap. It consists of cell stained sections (Nissl) in both frontal and sagittal planes, the former extending back as far as the mid-brain.

The atlas is designed for use with the Kopf stereotaxic apparatus, and a special mouse head holder. The volume is well presented and comprehensive, and will find a place in every research laboratory employing stereotaxic techniques in rodents.

CD MARSDEN