of speech characteristics, plus medical and communication management. This book brings together the medical, the speech science and the management aspects of the subject.

The authors, Yorkston and Beukelman, are clinical speech pathologists. Bell is a medical doctor working in rehabilitation: she provides a review of medical issues related to dysarthria. There is a chapter on the "Neuromotor aspects of Speech Production and Dysarthria" by Dr Michael D McClean.

According to a survey conducted in Washington, the condition of dysarthria constitutes 12% of the clinical case load treated in US speech pathology departments. The emphasis of this book is essentially clinical. Each chapter starts with a statement on "clinical issues" and in most chapters actual case histories are presented to illustrate particular disorders and their clinical management.

Throughout the book there are useful summaries which highlight various speech, acoustic or perceptual characteristics of the different forms of dysarthria—as well as the research studies conducted in the relevant areas. These give overviews of the neural basis of normal speech production, the neuromotor disorders seen in dysarthria and the physiological approaches to the measurement of those disorders.

The first three chapters contain general information, including the clinical perspectives on dysarthria which the authors define—chronic disorder, impairment, disability and handicap. Differential diagnosis distinguishing between motor speech disorders from language disorders and apraxia of speech from dysarthria is covered with a supporting background of current research literature.

Chapters 4, 5, and 6 provide the background to four aetiologies of dysarthria—congenital, acquired, non progressive and degenerative. The degenerative conditions mentioned are Parkinson's disease, progressive supranuclear palsy, dystonia, Huntington's chorea, Friederichs ataxia, Wilson's disease, amyotrophic lateral sclerosis (motor neuron disease), multiple sclerosis and myaesthesia gravis. Each is given a survey from the medical, neuropathological assessment and managements point of view.

Chapter 7, entitled "Assessment and Treatment Planning" provides an overview of evaluation including both perceptual and instrumental approaches to measurement. The remaining chapters, 8–13, provide information on intervention and clinical management.

Chapter 8, "Transition to Speech with Severely Dysarthric Individuals", reviews techniques for establishing early communication and physiological support for speech. Chapters 9 to 13 cover the aerodynamic aspects of speech production, respiration, phonation, velopharyngeal function (resonance), oral articulation and prosodic suprasegmental features—and their relationship to the breakdown of speech production and intelligibility in dysarthric speakers. These chapters also discuss the specific treatment techniques required for the selective breakdown of each speech parameter, as well as the management of the disorders.

This book succeeds in its objective to give guidelines on all aspects of the clinical management of the dysarthric speaker. There are some weaknesses, however. One is that the book fails to cover the area of evaluation comprehensively. There are three ways to evaluate dysarthric speech:

(a) Instrumentation, (b) Intelligibility ratings—perceptual analysis, (c) Formal test procedures. Instrumentation methods and intelligibility ratings are covered in the book, but one of the most frequently used methods of speech assessment is the formal test procedure and no mention is made of this. Nor are two of the most frequently used British dysarthria tests mentioned.^{1,2}

Another area given little attention is the possible co-existence of dysphagia with dysarthria in some degenerative disorders.³ As speech clinicians are becoming increasingly involved in the assessment and remediation of swallowing disorders, this is an important omission.

Apart from these relatively minor criticisms, this book is a useful textbook for the audience at which it is directed—the graduate student and practising speech and language pathologist interested in neurogenic communication disorders. Some chapters would be of use to the speech scientist as well as to the neurologist.

RENATA WHURR

References

- 1 Robertson S. *Dysarthria Profile* Bicester, Winslow Press, 1982.
- 2 Enderby PE. *Frenchay Dysarthria Assessment* San Diego, College Hill Press, 1983.
- 3 Logeman JA. *Evaluation and Treatment of Swallowing Disorders* San Diego, College Hill Press, 1983.

The Neuropathology of Temporal Lobe Epilepsy. (Maudsley Monographs No 31.) By C Bruton. (Pp 158; £20.00.) Oxford: Oxford University Press, 1988.

This interesting book presents the results of a study of 250 temporal lobes removed at operation for temporal lobe epilepsy by the late Mr Murray Falconer. These specimens were originally examined pathologically by Professor Corsellis whom the author acknowledges as directing the study. The author begins by describing the criteria by which the cases have or have not been included in the series as well as the pathological classification which has been followed. The latter is given an extended treatment and is well illustrated. In this section the reader can appreciate the difficulties met by the pathologist in the interpretation of the pathological changes, for some of which the classification still remains controversial.

The various pathological diagnoses are then listed according to age, sex, and side, and the factors predisposing to temporal lobe epilepsy are subsequently discussed as well as the effects of the operation. A detailed description of the pathology of the various types of lesion and the frequency with which they occur in this large group of temporal lobes is followed by an appendix.

I found a considerable degree of objectivity in the way the results are presented and the conclusions drawn. The author does not conceal the fact that in some patients, especially those who suffered trauma or in whom the pathology was not definite, the temporal lobes are better left in place, although it is difficult to decide in advance whether a temporal lobe should or should not be removed. Some readers might find part of the classification rather unusual: refer in particular to the "alien tissue lesions". However, although most of the abnormalities included are interpreted as tumours, one has to accept the fact that the non-progressive nature of others makes them more likely to be malformations, thus explaining the need for more general though strange, labels. The extensive and detailed account of the "Ammon's horn sclerosis" seemed to me particularly useful. This is a well known entity and is the commonest lesion in the present series but its pathogenesis and its role in the production of temporal lobe epilepsy are still unclear. The author does not present any definitive interpretation, but rather focuses the attention of the reader on a problem that still needs investigation.

In conclusion, a valuable book which, by intelligent use of a large series of specimens,

physicians, surgeons and pathologists will find helpful in the management of patients with temporal lobe epilepsy, and in interpretation of the morphological features of the lesions. I would have liked better quality illustrations but the price of the publication has been kept remarkably low.

F SCARAVILLI

Introduction to Neuropathology. By J Hume Adams, D I Graham. (Pp 309; £29.95.) Edinburgh: Churchill Livingstone, 1988.

An introduction for whom, to what? In their own words, the authors hope that the book will be of help not only to pathologists in training but also to experienced pathologists and to clinicians in the wider field of the neurological sciences. It is indeed a very good book for pathologists as it includes not only a clear introduction to brain cutting and histological techniques but also contains succinct, well-illustrated accounts of all the major areas of neuropathology. There are few references but probably sufficient to allow the reader to pass on to more detailed accounts of selected topics.

What is the relevance of this book to clinicians in the wider field of the neurological sciences? Is pathology any longer relevant to the practising clinician? Neurologists, neurosurgeons, neuroradiologists and psychiatrists must have all become much more aware of clinicopathological correlations with the introduction of improved CT, magnetic resonance imaging and other imaging techniques. Correct interpretation of the images requires more than a passing knowledge of the nature of the pathological lesions themselves. In this context, this very moderately priced book of some 300 pages is an excellent introduction to neuropathology.

The chapter on intracranial expanding lesions, cerebral oedema and hydrocephalus concentrates on the pathophysiological correlations relating intracranial pressure, blood flow and the damage caused to the brain as a result of space-occupying lesions and hydrocephalus. A similar approach is seen in the section on vascular and hypoxic disorders, a chapter that is well-illustrated with a mixture of macroscopic and microscopic appearances and diagrams. Broad surveys of bacterial infections, viral infections, fungal diseases and parasitic infestations are also well-illustrated.

The authors have a very wide experience of clinical neuropathology and this experience is reflected in their approach to the book. Neurosurgeons will find the chapters

on trauma and tumours particularly useful as they are two of the special interests of the authors. Other sections of the book, however, including demyelinating diseases, metabolic disorders, deficiency disorders and intoxication, system disorders, development, ageing and dementias are also expertly covered. The book ends with a brief survey of muscle and peripheral nerve diseases by Dr DGF Harriman.

Authors writing short textbooks covering wide areas always face the problems of how to express complex concepts in few words. Details may obscure the main purpose of the book or even bore the audience, whereas too brief an account may leave the author uninformed. I am sure that readers using this book to seek information on individual diseases or even if they are reading the book from cover to cover will find areas in which there is insufficient depth. This is unavoidable, but for the most part the broad concepts of neuropathology are expressed in a very lucid fashion and there is sufficient indication of how to find more detailed accounts. The general layout of the book is pleasing, but there are some rather unsightly arrangements of the illustrations in which the pictures have disappeared off the top of the page.

Perhaps my only criticism is reserved for the chapter entitled "The central nervous system and its reactions to disease". This section contains an account of the anatomy of the central nervous system which would be a useful revision manual for an experienced neuroanatomist but does not have the broad conceptual approach of the other chapters. This, however, is a minor criticism in an otherwise valuable book which I am sure will have a wide appeal to pathologists and clinical neuroscientists.

RO WELLER

Northfield's Surgery of the Central Nervous System 2nd ed. Edited by JD Miller. (Pp 893; £120.00.) Oxford: Blackwell Scientific Publications, 1987.

I was lucky enough to acquire a first edition of *Northfield's Surgery of the Central Nervous System* in 1976 before it went out of print. Thereafter available copies were treated like gold dust. I am sure this long awaited second edition incorporating many advances in neuro-imaging and patient management will be held in similar esteem. Some chapters have been extensively rewritten; others are little changed. In general the format remains the same and *Northfield's*' readable style persists.

Although of interest to all neurosurgeons, the book is still aimed at the neurosurgical trainee. It begins with a new introductory chapter by Professor Miller and includes a useful check list for revision as well as a few comments on neurological examination. I was surprised to read that Professor Miller believes that "assessment of the level of consciousness must always be accompanied by.... the oculo-cardiac reflex" among other things. His subsequent chapter on intracranial pressure is a model of clarity and considerably improves the original. The neuroradiology chapter has also been extensively revised. All the older imaging techniques are still included but described in conjunction with CT scanning and magnetic resonance imaging. Again this chapter is clearly written, but I was disappointed with the section on MRI which would be hard to follow without some pre-existing knowledge of the technique.

The chapters on tumours concentrate as before on the clinical aspects and offer a pragmatic approach to management. Perhaps a book of this size should have included more on basic research, updating the reader in subjects such as tumour immunology. The vascular section includes a new chapter on stroke and TIAs. Although few neurosurgeons now intervene in these conditions, I am sure that most still find this topic of considerable interest. Despite a 31 page chapter on hydrocephalus, only a few lines are devoted to "normal pressure hydrocephalus". Patients suspected of harbouring this condition are frequently referred to neurosurgeons. A text such as this should contain more on the problems of diagnosis and management. Similarly in an otherwise excellent chapter on spinal degenerative disease, more could have been said on lumbar spinal stenosis.

Every chapter is extensively referenced, but it is disappointing that the reference titles are not included. Surely the extra 30 to 40 pages required would be worthwhile?

These are minor points. This new edition provides a mass of valuable information in a single text. I have no doubt that the book will remain a favourite with both neurosurgical trainees and neurosurgeons throughout the world.

KW LINDSAY

Presurgical Evaluation of Epileptics. Edited by H-G Wieser, C Elger. (Pp 415; DM 258.00.) Berlin: Springer-Verlag, 1987.

I greatly enjoyed reading this book, and think that it is an important contribution to