A panel of anti-dystrophin antibodies might not only detect the presence of small in-frame deletions (as Dr Kyriakides points out) but may also suggest the presence of point mutations affecting the epitopes recognised by an individual antibody. Such information can then be used to narrow down the search for the precise gene defect by other molecular biology techniques.

In conclusion, I believe that the most rational and cost effective diagnostic approach to the study of dystrophinopathies is to perform immunocytochemical analysis with a panel of anti-dystrophin antibodies as a first option. As we have demonstrated,¹ this strategy allows the detection of minor abnormalities that cannot be found using only one antibody. If this analysis is normal, but a dystrophinopathy still suspected, a subsequent Western blot analysis (with a careful quantitation and correction for the myosin content) then becomes appropriate. The use of multiple antibodies will make the need for this more accurate but time-consuming technique less necessary.

F MUNTONI

Department of Paediatrics and
Neonatal Medicine,
Royal Postgraduate Medical School,
Hammersmith Hospital,
Du Cane Road,
London W12 0NN, UK

- 1 Muntoni F, Mateddu A, Cianchetti C, et al. Dystrophin analysis using a panel of anti-dystrophin antibodies in Duchenne and Becker muscular dystrophy. *J Neurol Neurosurg Psychiatry* 1993;56:26-31.
- 2 Nicholson LVB, Johnson MA, Gardner-Medwin D, Blrattachaya S, Harris JB. Heterogeneity of dystrophin expression in patients with Duchenne and Becker muscular dystrophy. *Acta Neuropathol (Berl)* 1990;80:239-50.

BOOK REVIEWS

All titles reviewed here are available from the BMJ Bookshop, PO Box 295, London WC1H 9TE. Prices include postage in the United Kingdom and for members of the British Forces Overseas, but overseas customers should add £2 per item for postage and packing. Payment can be made by cheque in sterling drawn on a United Kingdom bank, or by credit card (Mastercard, Visa or American Express) stating card number, expiry date, and your full name.

Modern Perspectives of Child Neurology. Edited by Y FUKUYAMA, S KAMOSHITA, C OHTSUKA and Y SUZUKI (Pp 360; Price: Not Indicated). 1991. ISBN Not Indicated. Publisher: The Japanese Society of Child Neurology c/o Dept of Pediatrics, Tokyo Women's Medical College, 8-1 Kawada-cho, Shinjuku-ku, Tokyo 162, Japan.

This volume is the published proceedings of the Fifth International Child Neurology and the Third Asian and Oceanian Congress of Child Neurology held in Tokyo in November 1990. Topics covered include metabolic encephalopathies, neurological infections, complications of immunisation,

febrile convulsions, intractable epilepsy and child neurology in tropical countries.

The papers vary greatly in their quality. Some are single case reports of unusual conditions, others are authoritative and up to date reviews of important topics in child neurology. An example is the paper by Jean Aicardi on Febrile Convulsions. Other papers describe large series of children with neurological disorders unfamiliar to child neurologists in Western countries. A prominent example is the paper by Udani on the presentation of CNS tuberculosis in children who have had BCG vaccination.

The section on metabolic encephalopathies include both clinical details of children with mitochondrial disorders and Reye-like syndromes but also discussion of possible pathogenesis. Aiyathurai's discussion of the significance of giant mitochondria and peroxisomal proliferation in Reye-like encephalopathies provides insight as to the metabolic derangements in these conditions. There are excellent clinical and biochemical reviews of MELAS and Leigh's encephalopathy.

There is no subject index in the volume which is essential when such diverse neurological topics are covered. This book will be of interest to the child neurologist because of its diverse subject matter but selective sampling of its contents is advised. Perhaps for future volumes a more selective approach to the material to be included is indicated. This may allow inclusion of discussions that follow the presentations, which are perhaps the most interesting aspect of specialist meetings.

MA CLARKE

The Molecular and Genetic Basis of Neurological Disease. By R N ROSENBERG, S B PRUSINER, S DIMAURO, R L BARCHI, AND L M KUNKEL. (Pp 1023, Illustrated; Price: £175.00). 1992. Oxford: Butterworth-Heinemann. ISBN 0-7506-9069-0

This formidable text has five eminent editors and over 100 contributors to 66 chapters and aims to present the metabolic and/or molecular basis of neurological disorders to clinicians who care for patients with hereditary neurological disorders, and to the important band of neuroscientists who investigate them.

The first chapter explains the rationale and methods of DNA investigations and serves as a good basis for understanding strategies for gene identification and mutation analysis. A wide variety of other topics include membrane excitability disorders, neuro-oncology, disorders of muscle and mitochondria. However, some chapters are more suitable for paediatricians than for neurologists. For example, the two conditions described under "Chromosomes" are Down's syndrome and Fragile-X syndrome, and there are 30 chapters on inborn errors of metabolism.

A useful result of genetic studies is the discovery of new proteins and the subsequent elucidation of their normal function. Dystrophin is one such example clearly described here. Another exciting outcome of genetic analysis is the correlation of clinical findings with gene mutations, as exemplified by the glycogen storage diseases, where different genes code different subunits of enzymes, and where there are many

different mutations of the same gene. There are also unusual pathogenetic mechanisms such as the size of a (CTG) repeat in myotonic dystrophy or the altered conformation of a gene product with prion protein disease or p53 mutations. Such oddities should serve to stimulate as well as educate.

However, the policy of describing those diseases with a known molecular or metabolic basis leads to a somewhat distorted view of neurology, so that rare diseases are given disproportionate space compared to common but poorly understood diseases. Nevertheless, this textbook represents a major and successful undertaking, although a subsequent edition should include chromosomal causes of cerebral malformations, more discussion of the neurodegenerative disorders of old age, and accounts of all the genes listed in Harding's and Rosenberg's neurologic gene map.

SARAH BUNDEY

Recent Advances in Clinical Psychiatry /8. (Series: Recent Advances). Edited by KENNETH GRANVILLE-GROSSMAN. (Pp 216 Illustrated; Price: £29.95 (Hardback)). 1993. Edinburgh, Churchill Livingstone. ISBN 0-443-04696-4.

Virtually every psychiatrist will be familiar with this series which presents reviews on topics in psychiatry, essentially a digest of recent literature. Chapters are helpfully concluded with important points for clinical practice, and at the end of the book there are reviews of some key papers published in 1990/1991.

Like most multi-author textbooks, the presentation is uneven. Some chapters contain undigested literature and, beyond some time saving on reading original papers, present little advantage to the reader. The chapter on Parkinson's Disease is excellent; (it critically evaluates the literature), as is the chapter on Liaison Psychiatry of Old Age, with helpful suggestions on the use of rating scales by non-psychiatrists to evaluate mental disorder in the elderly. Every doctor should read the chapters on Chronic Pain and Somatoform Disorders as the emotional component of pain is so often misunderstood and inadequately integrated into the treatment process with poor outcome for patient and doctor.

This book is, therefore, a must for psychiatric trainees preparing for Membership or more senior psychiatrists who wish to keep abreast of new developments. Doctors with an eclectic view in other specialties may well find it pertinent to their clinical needs.

MARTIN G LIVINGSTON

Neuropathies Peripheriques: Polyneuropathies and mononeuropathies multiples (in French). By PIERRE BOUCHE and JEAN-MICHEL VALLAT. (Pp 899, Illustrated; Price: Not Indicated) 1992. Maisonneuve Editions Medicales, 386 Route de Paris Sainte-Ruffine, BP 39-57162 Moulins-les-Metz Cedex. ISBN 2-7040-0683-0.

This book contains contributions from sixty authors. However, the fears expressed in the preface '...on connaît les risques de la pluridisciplinarité aussi bien dans la divergence d'opinions que dans la dispersion de

l'expression aboutissant à une sorte de tour de Babel.' are groundless: the text covers a wide field in a consistently lucid style.

The book is divided into three parts. The first addresses fundamental aspects of the histology, immunology, biochemistry and physiology of peripheral nerves; the basic pathological mechanisms underlying demyelination and degeneration; the analysis of biopsied nerves, including details of morphometric analysis and the examination of teased fibres. Introductory chapters are necessarily brief. However, in places treatment of a topic is perhaps too superficial; e.g. the omission of reference to NANC nerves in the section on the autonomic system is surprising.

The second part is dedicated to detailed descriptions of neuropathies, with emphasis on their classification, pathophysiology, clinical characteristics and treatment. Frequent use of tables is a helpful feature of the text. There are nineteen major chapters, each dealing with a specific group or type of neuropathy.

The third part contains chapters on neuropathies seen ... 'dans certains contextes plus particuliers.' Topics covered are neuropathies in young children and in old age; dysautonomic polyneuropathies; hypertrophic neuropathies; neuropathies associated with vasculitides and with carcinomas. The book closes with neuropathies in domestic animals.

The bibliography, almost exclusively in English, is comprehensive up to 1990, but there are few references beyond this date. The sparing use of photomicrographs is unfortunate. Moreover, those that are included are uniformly pale and rarely labelled. Some of the electron micrographs can only be appreciated using a magnifying glass and in a good light! The paucity of illustrations is a serious deficit in what is otherwise a most useful hand book.

SUSAN HALL

Handbook of Tourette's Syndrome and Related TIC and Behavioral Disorders. (Neurological Disease and Therapy Series/15). EDITED BY ROGER KURLAN (Pp 530 Illustrated; Price: \$165.00) 1993. New York: Marcel Dekker, Inc. ISBN 0-8247-8787-0

Once thought to be an excessively rare oddity, Tourette's syndrome may be the commonest of all movement disorders, although prevalence estimates vary hugely from five to 500 per 100,000. It also has the richest symptomatology, not only of sometimes bizarre and improbable movements, utterances and their urges, but also of disordered childhood behaviour or obsessive-compulsive disorder (which can be the only manifestation of the Tourette gene, particularly in females). However, until recently only four books had been published on this condition.

Now, like London buses, two more have appeared within months of each other (this Handbook, and the Advances Vol. 58 reviewed in April). Both are good, both in my view prohibitively expensive for most individuals (\$165.00 and \$145.00 respectively), and there is considerable overlap of authors and subjects (and occasionally of text, not even lightly scrambled by the w.p.m? paligraphia) between the books. Also, a lot of repetition within them, which

could perhaps have been edited down more tightly in the Handbook format to give a shorter and more focused product; indeed one or two of the 29 chapters would not be greatly missed. Nonetheless, the Handbook is the more comprehensive offering, with extensive coverage of the whole range of motor and psychic aspects, and what is known of their neurobiology, genetics, epidemiology and treatment. This is an invaluable reference book, but too highly priced for private purchase.

NIALL QUINN

Pediatric Epilepsy: Diagnosis and Management. EDITED BY W E DODSON AND J M PELLOCK. (Pp 446; Price: \$89.95). 1993. New York: Demos Publications. ISBN 0-939957-33-7

Most people with epilepsy experience the onset in childhood or adolescence. This welcome book of 37 chapters is written by 43 authors from the USA, and Michael Trimble is the first major newcomer of the nineties.

Growth in knowledge of pathophysiology is reviewed: brain structure, neural interconnections, ion channels, membranes and molecules and the metabolic and pharmacological consequences of seizures. Congratulations are due to Dreifuss for a readable chapter on classification and to Pinsky for a stimulating clinical chapter on non-epileptic paroxysmal disorders. The accounts of epidemiology, neurophysiological investigation and neuroimaging are compact although the last is sparsely illustrated. Good descriptions of many of the major epileptic syndromes conclude the first half.

Management is discussed in terms of drug therapy rather than educational care. There are differences between drugs used in the USA and in Europe. A chapter on new drugs is interesting. Some are not yet used in Europe.

Though there are chapters on epilepsy and IQ and on behavioural and cognitive aspects, there is little sense of the young person's experience of epilepsy, the importance of the impact on the family or the high frequency of associated disabilities. Nonetheless, the book is clear, scholarly and well referenced.

IAN MCKINLAY

Behavioral Neurology. (100 Maxims in Neurology/Vol. 1). By ORRIN DEVINSKY. (Pp 384; Price: £24.50). 1993. Sevenoaks: Edward Arnold. ISBN 0-340-53619-5

Don't let the title of this book deceive you into believing this is a work devoted to neuropsychology or neuropsychiatry. It is very much a neurologist's text, comprising 100 short sections on a variety of cerebral disorders, their recognition, significance and treatment. The main areas covered are mental status, delirium, aphasia, amnesia and the familiar triad of alexia, agraphia and apraxia. There are sections on visual processing, the syndromes of the right hemisphere, frontal, parietal and temporal lobes as well as chapters on epilepsy, head injury, psychiatric disorders and movement disorders.

The text is liberally peppered with excellent charts, schemata, case reports and, exceptionally nowadays, a selective and pertinent list of references. The writing is clear and explicit. For one author to have mastered and digested such a huge area of neurology and to have presented it so plainly is a considerable achievement. I am unaware of any modern comparable text, and strongly commend it to all clinical neurologists and especially to their disciples.

JMS PEARCE

Neurological Manifestations of Systemic Diseases in Children (The International Review of Child Neurology). By A STEINBERG and Y FRANK. (Pp 387; Price: \$119.00). New York, Raven Press, 1992. ISBN 0-88167-978-X.

This book covers the neurological manifestations of paediatric systemic diseases. It is suggested that it will compliment the general paediatric textbook that deals mainly with systemic manifestations of disease and the paediatric neurology textbook.

The aim is to assemble and summarise current knowledge and data. It is written specifically for the General Paediatrician, the Paediatric Specialist and the Neurologist.

The contents are arranged in the same way as standard paediatric textbooks listing common neurological complications (including sections on pathophysiology, neuropathology, clinical manifestations, and treatment) of nutritional deficiencies, rheumatic diseases, bacterial and viral infections, gastrointestinal and hepatobiliary diseases, renal disease and cardiac and endocrine diseases. Each chapter is followed by an extensive list of references. It is easy to read and informative and could certainly be a ready reference when one is presented with an unusual problem.

The forward states that in these days of technology child neurology remains one of the specialties where good clinical skills are important, as is a thorough knowledge of general paediatrics. This book will go a considerable way to achieving these ideals.

MJ NORONHA

Non-Epileptic Seizures. Edited by AJ ROWAN and JR GATES. (Pp 296; Price: £70.00). Oxford, Butterworth-Heinemann, 1993. ISBN 0-7506-9415-7.

This multi-author text is about pseudo-seizures, other types of paroxysmal events such as syncope and night terrors, for example, receiving only passing reference. Many chapter authors begin by suggesting that between 8% and 20% of those referred to special epilepsy units have non-epileptic seizures. However, a point that is not generally recognised in the book is the number of centres that such patients tend to visit, which will inflate the impression of the frequency of the condition.

Some authors attempt to identify clinical criteria that might be useful in distinguishing true epileptic and pseudoseizures from each other, most acknowledge the substantial degree of behavioural overlap. For example, seizures originating in the frontal lobe or supplementary motor area may have