tions from any standard neurological text, with pictures of children instead of adults.

I am particularly worried about certain therapeutic aspects. For example, it is disappointing to see against a small line diagram of a lateral view of the brain occupying a whole page under the heading 'learning disorders', the listing of Ritalin, Mellaril, and amphetamine, apparently with approval. In the treatment of infantile spasms, prednisone, ACTH, and pyridoxine are casually noted as agents of second choice, to be tried only when all else fails.

Migraine (present in 5–10% of children of school age) is dismissed in 18 lines and neither the periodic syndrome nor migraine accompagnée are mentioned.

Collaboration between respective contributors has not been wholly successful: one wonders if the author of the chapter on degenerative diseases shared his thoughts with whoever wrote the section on peripheral neuropathy, as their inevitable overlap tends to be unnecessarily repetitive, and not wholly consistent. The index is very inadequate.

JOHN WILSON

CLINICAL NEURO-OPHTHALMOLOGY By Bryan Ashworth. (Pp. 307; illustrated; £11.) Blackwell: Oxford. 1973.

The aim of this book is to provide a precise account of neuro-ophthalmology for ophthalmologists, neurologists, neurosurgeons, physicians, and others in related fields, a task which presents an enormous challenge. Unfortunately, this book fails to take up this challenge, and instead provides inadequate coverage for both the ophthalmologist and the neurologist.

Almost half the book is devoted to techniques of examination and investigation of the patient. There is an extensive review of radiological techniques without, however, reference to hypocyclusoidal polytomography, and, though numerous EEG tracings are included, the pattern evoked visual response has been omitted. The fundus pictures are of excellent quality, poorly organized and selected, and suffering some important errors of mislabelling, such as confusing an arterial and venous occlusion and misrepresenting atrophic papilloedema.

The clinical sections are disappointing and fail to contribute to many of the problems of neuro-ophthalmology. The chapters on the pupil (seven pages) and the orbit (six pages) fail to provide the basic information for accurate examination or diagnosis. The oculomotor system is included at a superficial level, and the definitions of internuclear ophthalmoplegia and Parinaud's syndrome neither make those entities clear nor conform to current concepts. It is sad to find entities like opsoclonus,

ocular bobbing, ocular myoclonus, periodic alternating nystagmus, and superior oblique myokymia not even recognized in this chapter, for these are in the vanguard of modern neuro-ophthalmology. The remaining chapters on visual loss due to retinal, optic nerve, chiasmal, and retrochiasmal disease give a brief summary of the causative factors.

This book is beautifully produced and illustrated, though many of the line diagrams are naive and often inaccurate. The contents and bibliography would seem insufficient for postgraduate use but this book may serve as an introductory primer for those contemplating a career in either neurology or ophthalmology. The price of £11 may, however, serve to keep this book off the shelves of those for whom it was intended.

M. D. SANDERS

BACKGROUND TO MIGRAINE. FIFTH MIGRAINE SYMPOSIUM 14TH AND 15TH SEPTEMBER 1972 Edited J. N. Cumings. (Pp. 182; illustrated; £5.50.) by Heinemann Medical: London. 1973.

This fifth migraine symposium maintains the wide interests of its predecessors. Clinical and laboratory work are both represented. Two main themes are vascular pathophysiology and biochemical causative factors. Changes in carbohydrate metabolism are still attracting study. It is interesting to see, as in the paper by Hockaday and colleagues, that concern about blood sugar levels *per se* is giving place to an interest in the wider aspects of related fat metabolism and the hormonal background. The linkage between hormonal changes and migraine derives from rather sporadic clinical observation over a long period. The subject is well reviewed and brought up to date by Raymond Greene in his Sandoz lecture. The influence of biochemical and pharmacological research on treatment is also discussed, though it must be admitted that the primary observations here are sometimes conflicting.

On the clinical side the potential of the City Migraine Clinic for advancing knowledge is well shown in a paper by Wilkinson and colleagues. Over 3,500 new patients seen in 2½ years, and the large number of acute headaches, gives an idea of the scope of this development. Blackmore's interesting observation of a fixed duration for fortification spectra will not surprise those dealing with migraine, but its implications for the mechanism of the attack need exploring.

The field of migraine studies still suggests much knowledge of the pathophysiology of the attack but substantial ignorance of the causes of migraine. This is also a not unfair comment on the present volume.

C. W. M. WHITTY