lished research. The areas of research covered include biochemistry, sociology (a most stimulating paper by George Brown), epidemiology, motivation of research workers and the quality of their work (an original and fascinating paper by John Cooper), mental handicap, child psychiatry, clinical research generally (a thoughtful paper by Robert Kendall), psychogeriatrics, behavioural and dynamic psychotherapies, pharmacology and neuropsychiatry. Finally Sir Denis Hill and Peter Sainsbury consider research in academic and hospital (and community) settings respectively. Some of the discussion after each paper is also recorded: this is of rather more variable quality.

The editor is to be congratulated on the speed of publication and the book is recommended reading for anyone interested in (and especially anyone contemplating) psychiatric research.

JL GIBBONS

Neurological Examination in Clinical Practice, 4th ed By Edwin R Bickerstaff (pp 339; £18) Oxford: Blackwell Scientific Publications, 1980.

When this book first appeared in 1963 the Midlands tradition of Stanley Barnes became part of contemporary neurology. It was careful and painstaking and laced with wisdom and wit, a guide to the grammar and syntax of practical neurology for the aspirant to consultant medicine. The reader cannot dawdle: before he has picked up *his* hammer and ophthalmoscope—not the vintage tools of fig 1—his work has begun. The step and the voice, even the time and manner of arrival, of some unseen patient have their message for him; and sometimes the clamour and commotion warn him of the extremes of neurology—the very ill and those who think that they are very ill. Step by step the author takes his readers through the niceties of history and examination, illustrating by word, diagram and picture almost every movement which the doctor and his patient must make. Where the patient fails, there is a comment always, an inference often, a diagnosis sometimes.

Why should this change in 17 years? Despite the demands of publisher and public for a new and bigger edition, the essential Bickerstaff remains. His claim

that diagnosis has been “transformed by one particular new technique,” CT scanning, belies the clinical skills of which he is an acknowledged master; more soberly he writes that scanning “has brought to intracranial diagnosis a new dimension” but unfortunately restricts comparison with earlier methods to arteriography. An unforeseen complication of CT scanning may be the disappearance of radiologists versed in air encephalography, still the most sensitive probe of the secret places of the skull. Although the chapters on laboratory and ancillary investigation are deliberately superficial, they form a well executed guide to the selection, quality and depth of such tests and are a useful complement to the clinical sections. Of the brilliance, range and penetration of these latter none can complain.

Over-emphasis is a subtle fault. Dr Bickerstaff’s statement that “by the time the history is complete, the physician should be three-quarters of the way towards the diagnosis” belittles the examination—the title and subject of his book. He keeps a style and idiom which are slightly artificial in 1980. Pupils react to light and are seen to constrict and converge but accommodation is invisible at the bedside: the near reflex or response, or the near triad, are better terms. Pulsation of the retinal veins, visible in most healthy subjects, is not mentioned as a sign of *normal* intracranial pressure. Rapid saccades, to command, in vertical and horizontal planes accentuate minor defects of ocular motility and the “onion skin” pattern of trigeminal analgesia is a classic sign of syringobulbia: neither is listed in the sections on the cranial nerves nor does the dramatic sign of mirror movements, indicative of spinal or medullary dysraphism, appear in the appropriate chapter. An account of muscle function with over 40 pictures showing the action of individual muscles and the method of testing them has an exceptionally wide appeal: in casualty, in the surgery, in the recovery room and in the orthopaedic clinic as well as in neurological practice. It is, therefore, unfortunate that the spinal root derivation of the obturator nerve (fig 52) has been confused with that of the superior gluteal nerve (fig 53). The error is not total as adductor magnus has an additional supply from the sciatic nerve,

thus enabling it to act as synergist to the hamstrings. An account of the differential response of myasthenic muscles to anticholinesterase and the control of therapy by serial edrophonium testing would enhance the value of this chapter.

Persisting with the vocabulary of aphasiology which was popular in 1963, the author has overlooked the needs of his readers in the Americas and in the Far East (his book has been translated into Japanese) who will be familiar with the phraseology of New England. However much he abhors the new “cartographers” of higher intellectual activity, he could have discussed with advantage fluent and non-fluent aphasia and the role of the arcuate fasciculus and other such bundles in disconnection syndromes. The chapter on the autonomic nervous system is the least satisfactory in the book, a deficiency reflected in his retention of a formal bibliography. Recent events may encourage him to include a note on brain death in the fifth edition. Meanwhile the fourth rank high in students’ reading round the globe.

CHARLES WELLS

The Diagnosis of Stupor and Coma, 3rd ed By Fred Plum and Jerome B. Posner (pp 373; \$22.00, £12.76) Philadelphia: F A Davis Co, 1980.

When the first edition of Plum and Posner’s monograph on *The Diagnosis of Stupor and Coma* was published in 1966, obviously it was destined to become a classic. That edition contained nearly 200 pages; the present volume has double that material. The clarity of the original exposition on the pathophysiology and clinical features of different causes of coma remains a model of medical writing. Many a casualty officer and embryo neurologist or neurosurgeon will have had occasion to thank these authors for their guidance on difficult cases of “undiagnosed coma.” But this book has always been more than a reference source, for it has laid down a logical framework for approaching the comatose patient, a framework built on physiological principles, and careful clinico-pathological correlation. The latter now has been extended even further by the easy access to CT scanning facilities available in the United States, and informa-

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tion on CT scan findings is included in this 3rd edition. However, in the United Kingdom, most district general hospitals do not have CT scanning available, so clear guidance on which patients requiring transfer to specialist neurological/neurosurgical centres would be helpful. In a book as comprehensive as this, there inevitably will be the occasional item to quibble with, but there are surprisingly few. This reviewer still has difficulty explaining to staff the critical difference between "vegetative state" and "akinetic mutism." The latter has historical reportability, but perhaps could be dispensed with, for the former is equally describable and covers others with similar extensive brain damage who are not necessarily immobile. This 3rd edition contains chapters on Brain Death, Prognosis in Coma, and Approach to the Unconscious Patient, none of which were included in the 1st edition. The chapter on Brain Death is particularly topical at this time, as patients and doctors attempt to recover from the sadly misdirected Panorama programme on the topic. The EEG occupies a prominent role in most American criteria, but the authors conclude that "In less legally demanding situations, it is doubtful that the experienced physician needs the EEG to tell him when the brain is dead." The chapter on Prognosis in Coma contains the analysis of outcome in 500 cases of acute medical coma drawn from New York, San Francisco and Newcastle upon Tyne. The data provide for the first time, some hard prognostic guidelines. For example, the chances of a patient in coma for 24 hours, not due to drugs, with both absent papillary and corneal reflexes making a useful recovery are virtually nil, whereas those unresponsive for three days yet still with preserved eye movements or localising motor responses still have about a 50% chance of making a good recovery. The quality of such guidelines will be improved by increased numbers of patients analysed, and shall prove invaluable to all concerned with the management of early management of the comatose patient, and should be compulsory reading for all concerned with such problems. Indeed, most will wish to purchase their own copy of this outstanding book, for you can be sure that the library's copy will never be on the shelf.

CD MARSDEN

The Facial Palsies Edited by Joseph Moldaver and John Conley (pp 235; \$35.75) Springfield, Illinois: Charles C Thomas, 1980.

Dysfunction of the facial musculature is of great importance in clinical practice, presenting the physician with an arduous test of his skill in both diagnosis and management. Any publication dealing with this complex problem is welcome, but unfortunately the present volume does little to assist the physician. The book is divided roughly into sections, dealing with anatomy of the facial nerve, mechanisms of peripheral nerve injury, diagnostic techniques, the clinical spectrum of facial disorders and therapy. Dr Moldaver has written the bulk of the book and an early chapter on racial variation of the facial musculature is interesting and novel, at least to the neurologist. Other chapters by the same author are, however, disappointing, particularly those relating to types of nerve injury and anatomy of nerve fibres where there are too many inaccuracies, eg on the morphometrics of the facial nerve. The chapter by Spencer compensates for this, but inevitably makes the book repetitive. The final two chapters by Graham and Conley which deal in detail with surgical anatomy are also of considerable merit.

The reader wishing to obtain insight into the problem of the aetiology of facial palsies will be disappointed. For example sarcoidosis is merely mentioned in a table of causes of VII nerve palsy, and there is no discussion of this important condition. Equally the section on the genetic causes of facial weakness is totally inadequate, there being no mention of the hereditary neurogenic disorders and only superficial discussion of the dystrophies. Abnormal movement disorders are discussed in a sketchy and incomplete fashion and there is the annoying etymological uncertainty in the section on hemi-facial spasm as to whether half the face is contracting or the whole face is in hemi-spasm. This is not the only section where the use of a dictionary by the proof reader would have been of benefit. The section on diagnostic methods is incomplete and unbalanced, far too much space being devoted to rheobase and chronaxie measurement and not enough to other electrodiagnostic techniques, let alone the omission of the stapedius reflex

mentioned only in the index. Medical therapy of idiopathic palsy is barely mentioned. In conclusion although there is a need for a definitive treatise on the facial palsies, this book does nothing to fulfil that end and it cannot be recommended to the student of clinical medicine.

PETER RUDGE

Cluster Headache: Mechanisms and Management By Lee Kudrow (pp 151; £12.50) Oxford: Oxford University Press, 1980.

Few diseases have attracted so many synonyms and eponyms as cluster headache; yet it remains a condition which still often eludes diagnosis when its victim first arrives at the neurologist's clinic. Lee Kudrow has amassed considerable experience of headaches in his private Medical Clinic for Headache in California. In this book, some 150 pages and eight chapters long he records his own clinical experience, he describes a number of original investigations carried out in the clinic, and, he sets his experience against a very thorough review of the literature.

The subject has been covered before, both in reviews and in migraine texts; but so far as I know this is the first monograph in English exclusively devoted to this "particular variety of headache." Successive chapters cover classification, epidemiology and clinical features; there is an interesting section which tells that these patients are taller, have a tendency to hazel eyes, smoke and drink more, but mercifully have similar occupations and psychological personality profiles to the rest of us, thus contradicting Graham's seductive vignette—"mice living inside lions."

There are excellent chapters on the various pathophysiological disturbances mooted as explanations for the syndrome and on treatment. British workers are less familiar with the chronic variant of the disorder which should surely be known as Chronic Migrainous Neuralgia rather than "Chronic Cluster"—a dreadful self-contradiction. We learn of the value of inhaling oxygen in acute attacks, and of the author's enthusiasm for courses of prednisolone and also of lithium, especially useful in the chronic variety of the disorder. This book is a good review of current knowledge of