Book reviews

subject matter. Benjamin Kent delineates hypochondriasis, hysteria and dyspepsia and deduces the innate seat of hypochondriasis as the minilunar ganglion and the solar plexus. He discusses the structure and function of the sympathetic ganglia: those "small, uniformed parts of the nervous system", the "tiny brains" of Winslow. Edward Hare points out that the organic lies for these complex psychological syndromes and we still lack the chalybeate of Sydenham whereby the drooping spirits are roused and revived. The genuine interest of the MD Thesis theme is "to solve the mind-body problem by scientific method or by Cartesian dualism. The book creates a broad sympathy for early 19th century life, and for the personal fortitude of Benjamin Kent. It is a sensitive portrait of an extended family and its friendships.

Benjamin Kent graduated LLMSSA and MD from the University of Edinburgh, was granted the MBPath without examination in the very year that the diploma was instituted as a College examination. He practised as a general practitioner and as a physician in Harrow, where he became a brickmaker, a flour miller, and lived in fear of bankruptcy. He also was a founder physician of the Adelaide Hospital, and gave the first ether anaesthesia in Southern Australia, to a patient who unaccountably expired for cachectic cause. He was grand master of the Freemasons order, and died unexpectedly after a successful cataract operation.

I enjoyed this book and commend it. It is written with charm and an eye for detail, and with the skill, interest and the precise thoroughness which one would expect from careful neurosurgery.

JR HERON


Time was, when the more cerebral neurologists on the London scene, after a search of the literature, current neurological texts and their own experience would prepare their personal textbook of neurology. Most books were composed by the individual, without author or manuscript reader, each were given what was deemed to be a title suitable for the aims of the work. Thus we had Textbooks of Neurology, Essentials, Aids and many "Diseases of the Nervous System", with one long-term runner.

It has become the fashion for almost all neurologists practising in the "academic environment" to consider a title, a new format, a new writing approach and effort to the diagnosis and management of patients with neurological disease.

We now have another handbook of neurology which makes no claim to rival its ancestral 40 volume equivalent, but asserts a usefulness to specialists in other fields, neurologists in training, primary health care physicians and perhaps medical students. This is a book which does not attempt to address the problems of neurochemistry, neurophysiology, molecular biology nor immunology but considers simple neuroanatomy and disorders of importance and high incidence in the United Kingdom.

The author's approach is different from that in the traditional textbook. He divides his material by symptom headings and a general classification of neurological disease and peppers the text with lists, saving considerable space and sparing literary effort. We are given, for example a list of 52 drugs known to cause seizures. If you prefer lists to prose then this book should attract you.

Written in New Zealand during sabbatical leave and with a script scrutinised by 25 of Professor Warlow's peers, the book presents a refreshingly unconventional approach to the material. It is succinct, in a factual accuracy and at times, capriciously provocative.

It has been said elsewhere that the major scientific advance in recent neurological practice has been the computer. The author considers the telephone to be the most important instrument at our disposal, but does not include it in his index!

As a short book of reference I feel that this true "handbook" will be very successful, but who is next and what will be new?

J FOSTER


Sir Hugh Cairns, one of the three pioneers of specialised neurosurgery in Britain, died in 1952, at the age of 45. His influence spread far beyond these shores and it is appropriate that his biography should have been written by Professor Fraenkel, his first encounter with Cairns was as a student in Oxford and whose career encompassed New Zealand and Australia.

Cairns was born in South Australia. His first venture abroad was as an orderly in the AAMC on the island of Lemnos during the Gallipoli campaign. He then returned home, completed medical qualification and was awarded a Rhodes scholarship. Before taking this up he served as a medical officer on the Western Front. His initial stay in Oxford was eventful: work with Sherrington, a rowing blue and engagement to be married. He was increasingly drawn towards surgery and held junior posts at the London Hospital, eventually being appointed to the honorary staff. The turning point in his career was the award of a Rockefeller Scholarship to work under Harvey Cushing.

It is evident from his letters home that Cairns greatly admired Cushing's surgery but much disliked the man. Anyone who worked with Cairns will recognise the irony of his computerised work in Boston. The account of the subsequent struggle to establish himself as a neurosurgeon in the now almost unrecognisable world of the voluntary hospitals of London makes fascinating reading. Needless to say, he was successful for, as Professor Gardner wrote: "he was constitutionally unable to give up any project on which he had set his mind and heart!"

Cairns' vital role in the establishment of the Oxford clinical medical school, although originally intended for post-graduates, is well known and is here fully described. This was immediately folowed by his appointment as Professor of Surgery. Cairns' influence on the treatment and prevention of head wounds was extensive and included St Hugh's head injury hospital, the organisation of mobile neurosurgical units in the field, and insistence on an effective helmet for dispatch riders.

The biographer must steer a narrow course between too much and too little detail and perhaps Fraenkel has erred a little in the latter direction. In the profusion of names and dates it is difficult to recapture the atmosphere of the Nuffield of early days: the devoted but often exhausted house surgeons striving far into the night to write notes of the meticulous standard demanded in a room dominated by a gigantic Bjerrum's screen: the Monday ward round with Cairns full of vigour to the end while all else wilted: the stern reproof for not testing the sense of smell in a patient with a spinal tumour. "Better get it done, boy!"

Hugh Cairns was a man of immense determination and energy whose personality attracted others to work enthusiastically with him in surgery, neurology, pathology, radiology and anaesthetics, but none worked as hard as he did himself. Was he a good surgeon? He, apparently, did not feel he was. He was certainly remarkably slow and not notably ebullient in the theatre. I still have vivid memories of having the privilege of assisting him while a medical student and being sharply reminded that his brain and not plasticine that we were handling.

When he knew he was dying Cairns' reaction was one of anger that his plans for future work would not be completed. His achievements were amply documented by Gus Fraenkel, were already sufficient to satisfy most mortals.

WB MATTHEWS


One of the accepted definitions of the word "principle" is that it is a fundamental basis from which other actions or conclusions may be derived. This book is therefore somewhat mis-named since it is indeed a review of a very wide series of neurological conditions, some of which are dealt with in considerable detail, while others are only briefly addressed. In any multi-author text the standard of the contributions is somewhat variable and often reflects the particular interests of the individual concerned.

Thus, in the first chapter on Anaesthesia Dr Albin's concern with Brain Retractor Pressure leads to a summary of some excellent work which he and his group have performed, and is of great interest. On the other hand it is somewhat doubtful whether the chapters on Congenital and Developmental Cranial Abnormalities and Primary Diseases of the Skull, both of which are extremely brief, should be included in a book claiming to address itself to fundamental principles of neurosurgery. The chapter on Spontaneous Intracerebral Haematomas fails to mention cavernoma, and the description therefore of Brainstem Haematomata is incomplete and by present standards inaccurate. In the same way, the coverage of the first of the two chapters on Intravenous Malformations and Brain Tumours is quite remarkably patchy. Thus Olfactory
Neurons. Neither of these two added sections fits into the described format of the book and the section on training has no place in this type of presentation.

The remaining sections I found to be disappointing. Each section consists of a disparate collection of papers varying in quality, originality and scientific context. The sections on vascular malformations of the brain and supratentorial tumours in children will provide a discerning reader with some information of modern approaches and treatments for a variety of pathological entities. The section on Neurosurgical Intensive Care I found to be unclear and it failed to convey the importance of an interdisciplinary approach in this area. I would not recommend this volume to young neurosurgeons in training, though some of the papers may be of interest to Researchers.

NEIL DWYER


Ira Black is a major contributor to modern neurobiology. His book contains a very intelligent and readable core which summarises a 1990 view of the chemistry of neural function. He moves from the signalling of rapid events by way of evanescent transmitters to the intracellular consequences which have longer and longer time epochs. He describes with great clarity the interaction of these imposed changes with the inherent genetic make-up of the cells. He shows precisely how these transient changes may produce longer and longer term events within single cells and outside them. The roles of transmitters, intracellular messages, enzymes, nuclear potentialities, peptides and growth factors are displayed with admirable clarity.

This core is submerged in a more speculative surround in which it is proposed that the properties of the molecules determine the potentiality of the organism and that the behavioural repertoire of the organism depends on its possession of specific molecules. This provocative suggestion leads to much more specific hypotheses such as the proposal that Alzheimer's disease is basically an error in the handling of nerve growth factor which prevents the proper function of cholineric basal neurons. I hope he is right in his guess. Even beyond this surround, the book contains an attack on "Functionalist Fallacy and Muddled Metaphor". I find his solution as unsatisfactory as the target of his attack but that does not detract from the value of his core summary.

PATRICK D WALL


This issue of advances in Neurosurgery is described as dealing with three major topics. The first is concerned with vascular malformations of the brain where Neuroradiological interventional and microsurgical treatment present major advances. The second covers treatment patterns for various supratentorial tumours in childhood. The interdisciplinary aspects of neurosurgical intensive care, particularly electrophysiology and anaesthesia, are treated extensively as the third topic. The book is made up of papers from the Proceedings of the 41st Annual Meeting of the Deutsche Gesellschaft für Neurochirurgie, Düsseldorf, May 27-30, 1990.

Unfortunately two other sections have been added. The first deals with the co-ordination of Neurosurgical training in Europe of the 1990's and the second consists of the winning poster presentations at the proceedings. It is easy to read with limited and highly selected references to the literature.

The underlying hypothesis is presented in chapter 4 and is essentially that vesicles containing neurotransmitters localised in the nerve ending originate on the nerve ending mitochondria by a process which is not clear. The evidence put forward for this suggestion is largely morphological and of a very speculative kind. Molecular mechanisms as to the manner by which phospholipids and cholesterol are incorporated into the vesicle membranes from the mitochondria are conspicuous by their simplicity and vagueness. Indeed in chapter 15 one of the proposals may be interpreted as meaning that the coupling of mitochondrial oxidative phosphorylation changes on nerve stimulation. Furthermore in chapter 16 (sec.16.1.2) the Fo fraction of the mitochondrial ATP synthase is described as mostly of intramembrane subunits of mitochondrial genetic origin. In fact only two of the seven known components are coded for by the mitochondrial genome.

It is these types of suggestion and inaccuracies, together with the highly selected references quoted which lead one to view the speculative hypothesis propounded in this book with some scepticism if not incredulity. Whilst I found the book interesting to read, I could not on balance recommend any serious reader to purchase a copy, despite its relatively low price (£12.00).

J B CLARK

SHORT NOTICES

Revue Neurologique


The title of this book is an unusual juxtaposition of words and intriguing which is why I agreed to review it. It is presented, I hesitate to say written, in a curiously disjointed style of numerous short paragraphs with a note-like use of words. It is easy to read with limited and highly selected references to the literature.

The underlying hypothesis is presented in chapter 4 and is essentially that vesicles containing neurotransmitters localised in the nerve ending originate on the nerve ending mitochondria by a process which is not clear. The evidence put forward for this suggestion is largely morphological and of a very speculative kind. Molecular mechanisms as to the manner by which phospholipids and cholesterol are incorporated into the vesicle membranes from the mitochondria are conspicuous by their simplicity and vagueness. Indeed in chapter 15 one of the proposals may be interpreted as meaning that the coupling of mitochondrial oxidative phosphorylation changes on nerve stimulation. Furthermore in chapter 16 (sec.16.1.2) the Fo fraction of the mitochondrial ATP synthase is described as mostly of intramembrane subunits of mitochondrial genetic origin. In fact only two of the seven known components are coded for by the mitochondrial genome.

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