Neurological Examination of Infants and Children, Neuroendocrinology, and Intraspinal Tumours in Children are noted. In between are chapters which are succinct accounts of single topics, or a particular approach to one aspect of a condition; thus the different approaches to the treatment of, for instance, germinoma and tumour invasion, disc excursion and well represented, enabling the discerning reader to make a well informed choice. Hypotheses, and approaches reflecting to some extent circumstances of neurosurgical practices in America are discernible, and not surprisingly so, since the majority of the authors practice in the United States. The topics contributed by renowned authors such as Janetta, Samii, Sweet and Tindall, to take but a few examples, give welcome inclusions in the work. Similarly, a range of topics which extends to Thermography, Neuro-transmitter Augmentation, The Management of Pain by Conduction Anaesthesia Techniques, and Ethics in Neurosurgical Practice reflect Youmans' repertoire in the selection of authors. The chapter entitled Brain Death could be particularised as a thoughtful presentation of this important subject reflecting its wide implications and the significant differences between the American and British approaches, the repercussions of which are well known. It is fitting also to mention the chapter on Noradrenergic and Adrenergic Biopsy for Neurological Disease which is co-authored by Dr Youmans himself and epitomises the combination of detail, clarity, and relevance invaluable to multiple authorship; it should be essential reading for neurosurgeons who undertake this particular procedure.

The 172 contributions have been grouped arbitrarily into 15 parts, with somewhat unsatisfactory results: Electro-encephalography appears as a limited contribution under Diagnostic Procedures, and its more relevant exploitation by the use of evoked potentials for intra-operative and intensive care monitoring is in a later part. There are separate chapters on Motor and Sensory Pathophysiology, a chapter on clinical, pathophysiological aspects which necessarily emphasise its role in the modern elucidation of arterio-venous abnormalities, and interventional neuro-radiology in this context has a separate contribution under diagnostic techniques, and again has to be considered in separate chapters on Arterio-venous Malformations of the Brain and Spinal Cord in Part 7 which is concerned with Vascular Disease. Neuroendocrinology has a chapter among a group of topics headed as Physiology, Homeostasis and General Care in Part 4 and is more usefully presented again in the authoritative chapter on Tumours of the Sella and Parasellar area in Adults in Part 10. A reader searching for information at this level must use the full list of contents which is found only at the beginning of volume 1. On the other hand the nearest distant index is found at the end of each volume and when tested for a number of topics was found to be almost entirely satisfactory.

Outstanding features in this work which will appeal to the neurologist are the emphasis upon clinical practice which is apparent from the first part onwards, the predominance of magnetic resonance imaging techniques and very advanced serial angiography in the Neuro-radiological section, extensive chapters on general operative techniques including Microsurgery, and even the use of the laser, in addition to which are many good diagrams of operative techniques presented in the context of chapters dealing with particular conditions. The standards of illustration are generally high throughout. The text is referenced throughout, the references are extensive, the third edition of Neurological Surgery continues to fulfil adequately the stated objectives of 17 years ago, and it is clear why it compares so well with its nearest three volume competitors.

Some years ago my secretary was asked by a neurosurgical colleague whether I would see a patient on a particular day. “Unfortunately not” she replied “he’ll be at a meeting on Charcot-Marie-Tooth disease”. “What, a whole day on Charcot-Marie-Tooth disease?” said the neurosurgeon. My secretary did not have the heart to tell him that the meeting was to last three and a half days! It was, in fact, the 1st International Conference on Peroneal Atrophies and Related Disorders, held in Marseille in 1976. It was a conspicuous success. How did the Second International Congress on Charcot-Marie-Tooth disease on which this publication was based, and which was held at the Arden Conference Center of Columbia University at Harriman in New York State in 1987, measure up? The emphasis, indicated by the title, was on pathophysiology, molecular genetics and therapy.

The initial two sections on clinical, pathological and neurophysiological aspects emphasise the now well recognised hereditary nature of CMT disease. The third section is devoted to axonal and Schwann cell metabolism and immunology and, although it contains some contributions of interest, the direct relevance to CMT disease is not extensive. The most important section is the next, on genetic linkage studies. It includes papers not only on CMT disease but also on type I familial amyloid neuropathy and hereditary sensory neuropathy. Linkage studies have now indicated the clinical evidence of genetic heterogeneity in CMT disease. X-linked inheritance is established, with a gene locus on the proximal long arm of the X chromosome. In some families with type I autosomal dominant hereditary sensory neuropathy (HMSN I) the abnormal gene is on chromosome 1. Unfortunately the discovery that in substantially more families with HMSN I the abnormal gene is on chromosome 17, had not been made at the time of the meeting. The loci for the genes responsible for other forms of CMT disease including autosomal dominant HMSN II, autosomal recessive HMSN I and II, and HMSN III, have yet to be defined, as have those for complex forms of HMSN.

The final section is on metabolic studies and treatment. The metabolic studies on...