symptoms remain unresolved. Nowhere is anxiety-provoked hyperventilation mentioned as a mechanism of giddiness, a common, possibly the most common, cause of unsteadiness and dizziness, easily reproduced in the clinic without expensive investigation or resort to surgery.

No-one can doubt that pain can arise from the masticatory apparatus ("T" = teeth; "M" = muscles; "J" = joint — Mr. Hamish Thompson) and we as neurologists need to be aware of these structures in the differential diagnosis of face and head pains. We then require dental colleagues, to whom we can refer patients and hear either "Yes, there is trouble in my field that I can treat" or "There is no pathology in my territory" or "I am not sure but I will treat on its own merits what I see wrong and will then refer back to you if necessary". Such colleagues are not easy to find and this book is not reassuring on this practical aspect. It is however valuable to read what can be done although this cautionary aphorism of the late Lord Henry Cohen can be difficult for some specialists to apply, "The feasibility of an operation is no indication for its performance."

JN BLAU

Modern Neurosurgery Volume I. Edited by M Brock. (Pp 484; DM 98: \$43.60.) Berlin: Springer-Verlag, 1982.

This volume of almost 500 pages presents 55 of the 800 papers read at the 7th International Congress in Neurosurgery in Munich in 1981. The 55 papers have been selected very carefully and divided into 10 sections covering a wide range of neurosurgical topics from technical development and head injury to vasospasm and functional neurosurgery. All of the papers which have been selected have something new to offer and are written in a style which makes them easy to follow. The presentation of diagrams, radiographs and so forth is good.

The foreword suggests that this is the first of a series which will be seen as reference volumes presenting an over-view of the specialty every four years. If the standard of the present volume can be maintained then this would seem to be quite possible. The idea is also presented that this volume could act as an introduction to current neurosurgery for undergraduates. This is perhaps a little ambitious although any undergraduate with good motivation and a taste for heavy bedside reading would get some stimulus and benefit from this volume.

CE POLKEY

Phobia: A comprehensive Summary of Modern Treatments. Edited by Robert L DuPont. (Pp 300; \$34.00.) New York: Raven Press, 1982.

A torrent of literature is pouring out on the subject of phobias, and this latest addition reports papers presented at the Second Annual Phobia Conference held in Washington, DC in 1980. Most of it concerns anecdotes about treatment of phobias by a variety of exposure approaches, and some uncontrolled data about outcome. The one controlled study mentioned briefly and incompletely is that of O'Brien *et al* on self-exposure treatment of agoraphobics conducted with and without the active participation of clients's husbands, results to date showing that for most clients behavioural treatment either improved the marriage or had no substantial effect on it. The book is for specialists in phobias to browse in for gleaning some titbits from the American scene rather than for rigorous analysis of critical issues.

ISAAC MARKS

The Craniosynostoses: Causes, Natural History and Management. By David John David, David Poswillo and Donald Simpson. (Pp 331; DM220, £52.00.) Heidelberg: Springer-Verlag, 1982.

The title of this book may not convey the full extent of the subject matter, which is about developmental skeletal deformities of the skull and facial bones and their correction. Although others were concerned with abnormalities of skull shape, even in the last century, widespread interest did not arise until about thirty-five years ago; this was particularly stimulated by the work of Ingraham, Matson, and Alexander. However, their surgical efforts were restricted to the skull vault, and the stimulus to recommend operation was chiefly the prevention of mental retardation. Later it was shown that the causal relationship between synostosis and mental handicap was less clear than had been thought. The importance of the skull base and facial skeleton as a source of associated abnormality became apparent, as did the association of deformities in the head with those elsewhere. Finally, genetic abnormalities came to be linked with skeletal and other lesions, so that in an appendix to this book no fewer than 59 syndromes are listed. In many of these a chromosomal abnormality has been identified or the manner of inheritance is known.

The authors of this book are part of a

well-known Craniofacial Unit in Adelaide, South Australia, which consists of a plastic surgeon and a neurosurgeon, supported by specialists in all the fields related to the head, including ophthalmology and various dental specialties. Naturally there are anaesthetic and radiological members of the team and a wide range of other important advisers including psychiatrists, nurses and social workers. Their large experience forms the basis of this work. The authors have shown that much can be done to change these deformities towards the norm, and that much more can now be undertaken than was possible in the past. "The concept of cranio-facial surgery is largely based on the fact that the orbits can be safely moved in three dimensions", the maxilla and mandible can be altered, and all this in addition to the "established role of the neurosurgeon in the correction of deformities associated with craniosynostosis".

Enthusiasm for operating on the craniosynostoses waned when it became apparent that normal intellectual development and normal vision could be compatible with certain types of premature sutural fusion. However, it was always clear that there was an urgent need for early surgery in the more severe cases, and recognition has been given to the social and psychiatric trauma that a deviation from an acceptably normal appearance can produce. This alone justifies the undertaking of, not only the relatively simple linear craniectomies of the vault, but also the correction of disfiguring facial lesions.

This book is the most comprehensive work on the subject so far and gives a detailed assessment of present knowledge from a clinical, pathological and anatomical point of view. Current methods of surgical management are reviewed. There is an extensive bibliography and it is well produced. The book is strongly recommended to all who care for young babies in postnatal clinics and obstetric departments, and to plastic surgeons, neurosurgeons and paediatricians. There is a great deal still undiscovered about these conditions, but most people have much they could learn about what is already known. It is a mine of information.

PETER SCHURR

Cytochemical Methods in Neuroanatomy Volume 1 of Neurology and Neurobiology. Edited by Victoria Chan-Palay and Sanford L Palay. (Pp 584; \$96.00.) New York: Alan R Liss, 1982.

This is an excellent book which bears wit-

ness to remarkable advances in neuroanatomical technique. It is the product of a multi-disciplinary meeting of neuroscientists at the National Institutes of Health in June, 1981 and its 28 chapters cover concise areas of neurocytological research. Common to all is the critical application of cytochemical techniques to solve problems in neuroscience research, be they anatomical, physiological or pharmacological. This is not a textbook of cytochemistry, and one will not find, for example, technical aspects of catecholamine or peptide localisation covered comprehensively. The aim is to show how neuroscientists are exploiting these new techniques to solve a great variety of problems, and at the same time to provide a critical account of their use.

The well established techniques based on anterograde and retrograde transport of tracer substances are touched upon in a fine opening chapter in which Hendrickson shows how she and her colleagues have combined autoradiographic tracer studies with conventional histochemistry, immunocytochemistry, and ^{14}C -deoxyglucose autoradiography to analyse the nature of occular dominance columns of the monkey striate cortex. A relatively new approach which features in several chapters, and is reviewed in detail by Cuénod and colleagues, is transmitter specific retrograde labelling. Various tritiated neurotransmitters (including amino acids, biogenic amines, and choline) can be localised within neurons, pathways, or (with electron microscope autoradiography) synapses, following intracerebral injection, although the biological significance of this intriguing phenomenon remains uncertain. Theoretical aspects of immunocytochemical technique are well covered, with consideration of antigen-defined immunocytochemistry, the use of monoclonal antibodies, and a helpful chapter on the validity of these techniques, and the significance of false negatives and false positives. There are two chapters on the localisation of GABA-ergic neurons (both giving detailed protocols) and there are technical details in the chapters on the localisation of serotonergic systems and description of intracellular labelling (with horseradish peroxidase) of physiologically identified neurons in the central nervous system. As one would expect, neuropeptides figure prominently, introduced by Chan-Palay in a fascinating account of the co-existence of neuroactive substances within individual neurons in the mammalian CNS, and including chapters on the

cytochemistry of enteric nerves, the dorsal horn of the spinal cord, the avian retina and tectum, neuroendocrine and autonomic neuropeptides, and consideration of peptide heterogeneity and neurotypy.

The editors and publishers must be congratulated on presenting an elegantly finished, finely illustrated, and relatively up-to-date volume packed with ideas and technical information. It will be frequently consulted in the library and the laboratory. Its eclecticism, and the nature of modern neuroscience, ensure that it will be read by neuroscientists of many disciplines, and its price will be within the budget of most departments. This is not a book which aims to bridge the gap between basic neuroscience and clinical neurology, but for neuropathologists, neuropharmacologists and clinicians who wish to keep abreast of a rapidly changing field, a departmental copy will be well worthwhile.

NIGEL LEIGH

Radiology of Spinal Cord Injury. Edited by Leonid Calenoff. (Pp 573; £58.00.) London: Year Book Medical Publishers Ltd, 1981.

This book is written by various members of the multidisciplinary team of a special rehabilitation centre for spinal injuries. It is intended to be (and probably is) a comprehensive source of reference dealing with the subject. There are four sections. The first presents a survey of the normal radiological anatomy of the spine and cord in a novel and attractive way. The second part deals with the acute phase of spinal cord injuries. Fractures and dislocations and their complications are described and illustrated, and the neuroradiological chapter includes many computed tomographic and angiographic images. The third part deals with rehabilitation, being concerned mainly with the disturbances of the urinary tract and bones and joints which complicate spinal trauma. Part four comprises unrelated topics—children's spinal injuries, the value of radionuclides in diagnosis, the detection of associated injuries.

Prospective purchasers would do well to check carefully what sort of book they are buying. Only one-third of the contents actually deal with the radiological signs of spinal trauma. Most of the remaining space is taken up with describing possible complications of a chronically immobilised patient. These complications are common to cases of chest and abdominal trauma and certain non-traumatic situations as well as spinal injuries. Your reviewer questions

the relevance in this book of chapters describing peripheral venography, the ultrasonic findings in gallstones and the surgical aspects of reducing and stabilising spinal fractures. Perhaps the authors are unsure of the audience they are seeking: despite their effort to cover all aspects from diagnosis in the early hours to the final reaches of rehabilitation, one wonders if they have produced a text that is sufficiently relevant or complete to make the book compelling reading for surgeons, neurologists and other non-radiologists.

The radiologist has much to learn, particularly from the chapters dealing with radiological anatomy and acute spinal trauma. The chapters on cord anatomy (by a neurologist) and that on the vertebral column (by a neuroradiologist) are excellent and complete, correctly stressing the primary importance of imaging the integrity of the canal and its contents in every case of spinal injury. Chapters 4 and 5, dealing with fractures and dislocations and neuroradiological assessment, are probably the best in the book, being profusely illustrated with examples of injuries to the cord and vertebrae shown by angiography and computed tomography which have not yet reached our textbooks. Apart from this the book has several other merits: an up-to-date albeit all-American review of the literature appended to each chapter; commendably high quality line drawings and radiographs, and a general readability of the text. A book to be recommended for the departmental library.

EDMUND H BURROWS

The Thalamus and Midbrain of Man. By Ronald R Tasker, Leslie W Organ and Peter A Hawrylyshyn (Pp 505; \$49.50) Springfield, Ill. Charles C. Thomas, 1982.

This book presents a comprehensive physiological atlas of the thalamic and mesencephalic regions in man. It is based upon neurostimulation data obtained during 198 stereotactic thalamic procedures, carried out for varying conditions, over a ten year period.

A careful analysis of over 9000 stimulation sites along 835 trajectories has been made and the results plotted on the brain maps of the Schaltenbrand and Bailey Stereotaxic Atlas. Such techniques demonstrate the precise location of over thirty different physiological responses. They also illustrate the degree of precision such methods provide for determining modality topography and somatotopical organisation of human thalamic nuclei.