William W. Orrison, Jr.

Atlas of Brain Function

With the development of new neuroradiological techniques, our understanding of brain functions has largely improved. These techniques allow us to illustrate the advances involved in functional imaging of the brain. But with increasing knowledge, we need an updated guide for immediate and easy consulting of the exact function of brain structures and their connections. Thus this pocket guide provides an excellent basis for easy information about the different brain structures. 188 illustrations, which comprise fine drawings as well as CT and MRI scans, show in detail each cerebral structure and its different functions and connections. The first chapter is an expanded glossary providing concise definitions of each neuroanatomic brain part and its functional relationships. These structures are illustrated by sagittal, axial and coronal CT and MRI scans on 2D and 3D imaging, enhanced by drawings. The text is very didactic and each illustration is accompanied by succinct but precise explanations. The small size of this atlas and the glossary facilitate an immediate search. Unfortunately the quality of the radiological illustrations is not good enough and often too dark. We hope the publishers will correct this imperfection. Apart from this, the atlas is helpful for neurologists or radiologists interested in brain functions. It contains valuable material, rapidly accessible, not only for the beginners among neurologists or radiologists but also for the experienced specialist.

Philippe Vuadens, Lausanne

David N. Rushton

Handbook of Neuro-Urology

In keeping with the Handbook tradition, this volume offers practical, basic information, and pertinent clinical problems are addressed. Volume 28, Handbook of Neuro-urology, contains chapters written by 22 contributors, 10 of whom are from England. By and large, the chapters are authoritative, well presented, packed with
useful tables and up-to-date. Those with prior training in neurology will find the urological sections more useful and vice versa. This book covers many of the aspects of normal and abnormal function of pelvic organs but mainly deals with bladder dysfunctions and sexual disorders.

The layout is clear and well organized. The opening chapters review the anatomy, physiology and neuropathology of pelvic organs, and the authors would be hard to better. Clinical accounts, urodynamic assessment and clinical neurophysiology are followed by chapters on clinical problems and their management (urinary incontinence, voiding and retention, bladder disorders in spinal cord injury and brain damage, autonomic failure, disorders in late life, surgical management of the neurogenic bladder, incontinence appliances).

In this form, this handbook will undoubtedly help disseminate important current ideas, new methods of investigation and new and successful methods in treatment, drugs and operations in ‘sphincter disturbance’ to a wider audience. In summary, this book is not only an authoritative source of references for all those interested in neuro-urology but also recommended to neurologists, neurophysiologists, paediatricians, urologists and specialists of gynaecology and obstetrics.

Thierry Kuntzer, Lausanne

Geoffrey Donnan, Bo Norrving, John Ramford, Julian Bogousslavsky (eds.)  

**Lacunar and Other Subcortical Infarctions**  

This multiauthored book is an overview of the state of the art in the field of subcortical infarctions. It includes 23 chapters, grouped into six main sections and covering the various aspects of the topic. The first three sections (chapters 1-11) deal with general issues on conceptual, pathophysiological and clinical aspects of lacunar infarctions. The first chapter is a nicely written and illustrated historical review, representing a skillful mix of scientific items and biographical vignettes. The following chapters, and particularly those dealing with risk factors, MRI, angiography, EEG, and prognosis in lacunar infarctions, are exhaustive overviews of the present knowledge on these topics. The reader can realize that individual contributors do not always share the same opinions with respect to some general issues which are still matters of debate, such as the possible misdiagnosis of lacunes and small hemorrhages, the relevance of signs of cortical dysfunction, and whether diagnosis should rest mainly on clinical or neuroimage findings. However this adds to, rather than detracts from, the value of the information conveyed by the book.

Sections IV and V (chapters 12-22) review more specific issues such as topographical aspects (with special emphasis on the region of basal ganglia), and miscellaneous subjects (among others, leukoaraio-sis and movement disorders in subcortical infarctions). The final section includes a single chapter, which conveys a proposal of classification of lacunar infarctions, based on clinical-radiological grounds. As all classifications, it could probably be debated and improved in the future, but there is no doubt that a great effort has been made to develop a uniform terminology in a field whose complexity has often been paralleled by some degree of confusion. All the chapters are written in a clear and concise style despite the enormous amount of bibliographic information, as demonstrated by the over 900 references listed at the end of the book. This is not surprising, since all the contributors are outstanding investigators in this field. Although it is hard to find any flaws in this book, a minor remark could be the little attention on cognitive aspects of multiple lacunar infarctions. The book addresses the general audience of neurologists, but it will be an essential tool for people involved in research in this topic of cerebrovascular diseases.

Carlo Loeb, Genoa

Amos D. Korczyn  

**Handbook of Autonomic Nervous System Dysfunction**  

In keeping with the Handbook tradition, this volume offers practical basic information, and pertinent clinical problems are addressed. Volume 38, *Handbook of Autonomic Nervous System Dysfunction*, is organized into 32 chapters written by 50 contributors. This multi-authored book largely succeeds in providing state-of-the-art information in laboratory and clinical aspects of the autonomic nervous system.

The opening chapters review the physiology, neuropathology and classification of autonomic nervous system dysfunction and are followed by chapters on clinical problems and their management (Horner’s syndrome, Chagas’ disease, familial dysautonomia, Hirschsprung’s disease, autonomic failure, reflex sympathetic dystrophy, hyperhidrosis, cardiac involvement, syncope, diabetic neuropathy, Parkinson’s disease, Shy-Drager syndrome, peripheral neuropathies, side effects of drugs, salivary gland disorders, gastrointestinal disorders, enuresis, urethral syndromes, sexual dysfunction). The book ends with an analysis of different practical tests (blood pressure monitoring, sympathetic nerve activity, pupill investigation, cold pressor test).

I enjoyed the chapters on sweating disorders and the skin wrinkling test. By and large, this handbook will undoubtedly help disseminate important current ideas as well as new and successful methods of investigation and treatment in autonomic nervous system dysfunction. In summary, this book is warmly recommended to all neurologists, even specialists.

Thierry Kuntzer, Lausanne
Despite its frequency, urologic dysfunction in patients presenting neurological diseases is not rarely underinvestigated. This is probably due to the lack of specificity of urologic symptoms and to the necessity to perform urodynamic evaluations. This book offers a comprehensive review of urinary complications in neurologic diseases.

It is well structured, with six parts divided in concise chapters including the anatomy and physiology of the urinary tract, various techniques of investigation, the main neurologic diseases, pediatric neuro-urology, and specific therapies. The part dealing with neurologic involvement in urological diseases demonstrates the complexity of neuro-urology.

Written for neurologists and urologists, this is a practical book and should therefore not only interest specialists. Chapters that discuss urinary incontinence and neurological implication, as well as urinary retention and dysfunctional voiding by patients presenting without any apparent neurologic abnormalities are of general interest. Overall, this is an excellent and easily readable book that has much to offer to clinicians with interests in neuro-urology.

Bernard Nater, Lausanne

Atlas of Human Spinal Cord Evoked Potentials
Butterworth-Heinemann, London £95
180 pp.
ISBN 0-7506-9631-1

This book contains 7 chapters written by 13 contributors, comprising a reference text and atlas for those readers with a specialised interest in the field of spinal cord neurophysiology. Spinal-cord evoked potentials (SCEPs) are now recorded after stimulation of the peripheral nerves and motor cortex, and therefore SCEPs of the long ascending and descending tracts can be compared during intracranial or spinal cord surgery. The opening chapters review the origins and properties of SCEPs, the methods and the diversity of SCEPs recorded at different vertebral levels. They are followed by chapters on changes of SCEPs recorded during intra-operative monitoring (motor evoked potentials, influence of anaesthesia, spinal surgery for pain and spasticity, and orthopaedic spinal surgery). Illustrations are clear and accompanied by a significant amount of explanatory text with 581 references. This book will undoubtedly become an important reference source for clinical neurophysiologists who are relatively new to intra-operative spinal monitoring or for those who wish to optimise current techniques.

Thierry Kuntzer, Lausanne

Book Reviews
Clinical Neurophysiology has been born out of two long-running Butterworth books, EEG Technology and Clinical Electroencephalography. The two volumes of this work, as stated in the preface ‘have been planned as an integrated whole to provide a new comprehensive textbook of clinical neurophysiology’. Overall, the publication gives a full and lucid account of methods and techniques in clinical neurophysiology.

The first volume has been divided in three parts (Origins and techniques; Electromyography and nerve conduction, and Evoked potentials), and the companion volume, not available for review, in four parts (Electroencephalography; Paediatric and neonatal neurophysiology; Special techniques and applications, mainly neurophysiological monitoring, and Setting up and running a department of clinical neurophysiology).

Volume one contains 21 chapters written by 5 principal authors and 14 contributors. By an large the chapters are authoritative, well-presented and packed with useful tables and figures. The initial technical section is followed by a description of electromyography and nerve conduction studies; the opening chapters nicely describe the early history of electromyography, review the anatomy and function of peripheral nerves as well as the clinical measurements of nerve conduction, and discuss the normal and pathological findings of electromyography. The layout is clear and the organisation readily mastered. It may be a disappointment, however, not to find criteria of motor conduction block, mention of the usefulness of percutaneous monopolar proximal stimulations, late responses other than the H-reflex and F-waves, such as indirect responses (motor axon reflexes, double indirect discharge) or direct responses (double discharge), and cranial nerve testing.

On the other hand, I enjoyed chapters 2.5. and 2.6., discussing the problem-orientated approach, which emphasises important clinical topics (care of the patient, procedures for stimulation and recording, artefacts, effects of temperature, age and gender, conduction studies of individual nerves, as well as specific clinical requests such as neurophysiological examination in patients suspected to have polyneuropathy, EMG evidence of myopathy or motor neurone disease). Assessment of autonomic function is followed by comprehensive chapters on pelvic floor neurophysiology and quantitative sensory testing. Excellent reviews of the current usefulness of quantitative electromyography are also provided.

The evoked-potential section is also organised in a very logical manner and contains a useful chapter on diagnostic strategies. In summary, this is a good reference text that combines a clear presentation of basic principles with an emphasis on addressing pertinent clinical problems. It is therefore useful to all clinical neurophysiologists when faced with new or unusual cases.

Thierry Kuntzer, Lausanne
Much attention has been directed to epilepsy, and a wide range of new medicaments and surgical treatments has been developing. *The Treatment of Epilepsy* is an excellent textbook focusing on these new treatments and the management of epilepsy. The therapeutic approach to different types of epileptic seizures is presented, according to the Classification of the International League against Epilepsy.

The book is divided into 4 main sections, preceded by a fascinating introduction devoted to the historical evolution of treatments of epilepsy. Rare studies are reported, about which we cannot be indifferent. In 6 chapters, the first part develops the pathophysiology and the basis of epileptic seizures, followed by a review of the different aetiologies. This is an excellent introduction before the specific treatments of epilepsy are tackled. In fact, many tables clearly illustrate the classification and aetiologies of seizures and offer a good recapitulation of differential diagnoses. Moreover the classification of cortical dysgenesis is richly illustrated by MR images.

In the second part, the section of pharmacotherapy is introduced with a review of different mechanisms of action and pharmacokinetics of anti-epileptic drugs. In 11 chapters the management and principles of treatment of epileptic patients are extensively developed. Thorough information and advice assist the physician in deciding appropriately when to begin or to stop an anti-epileptic treatment, in children as well as in elderly patients.

The third part of this book is essentially devoted to anti-epileptic drugs. Each substance, known or new, is reviewed in detail: pharmacokinetics, place in the treatment of epilepsy, appropriate indications, side effects, mode of administration and so on. For each drug, a table summarizes the main information, which is very useful, above all for the new drugs. The last part develops the diagnostic approach leading to surgery of epilepsy. After the different cerebral localizations of epileptic symptoms have been presented, investigational techniques are developed individually, such as scalp EEG, invasive EEG, MRI, and PET scan. These different chapters clearly explain the principles of these new methods with their advantages or disadvantages. They are richly illustrated, but the MR images are not of very good quality.

The list of contributors is large and offers information on the best specialists in the field of epilepsy. This textbook is agreeable to read, neatly illustrated with coloured tables. The extensive list of references is very up to date. Finally, this book can be recommended to each neurologist, neurosurgeon or physician interested in epilepsy.