Techniques in Clinical Neurophysiology: A Practical Manual, 1e

From Churchill Livingstone
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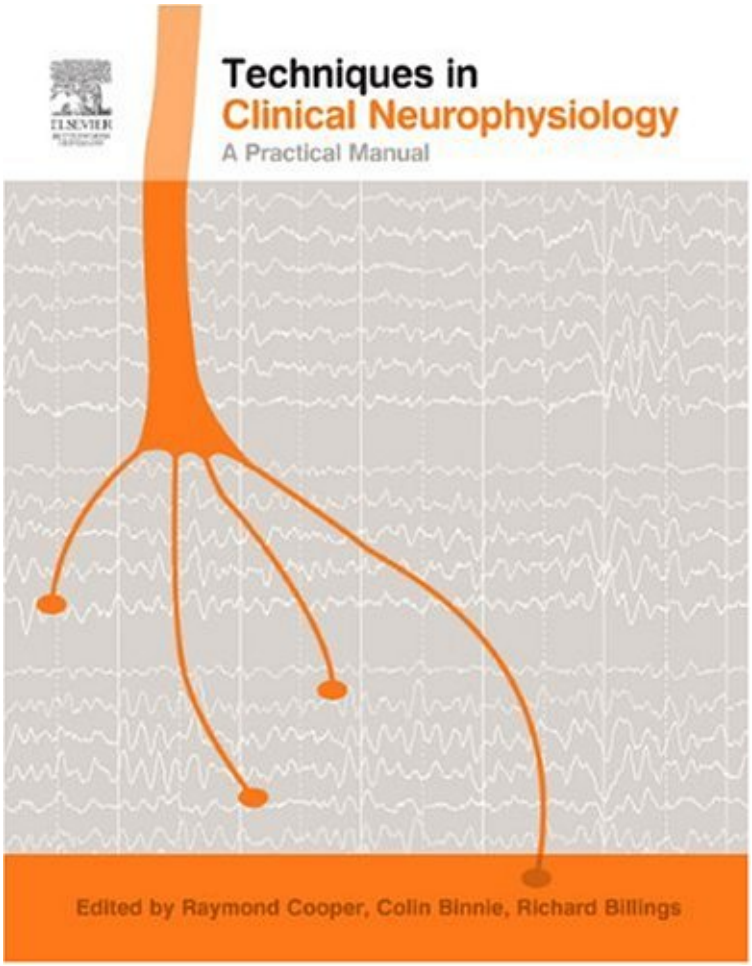

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From Churchill Livingstone : Techniques in Clinical Neurophysiology: A Practical Manual, 1e before purchasing it in order to gage whether or not it would be worth my time, and all praised Techniques in Clinical Neurophysiology: A Practical Manual, 1e:

Techniques In Clinical Neurophysiology - A Practical Manual is derived from the hugely successful definitive text reference, Clinical Neurophysiology 2/e. Both publications have been prepared by experts of international renown, and follow a tradition of multidisciplinary team effort - with a strong foundation in neuroanatomy and neurophysiology - high standards of practical technological skills as well as those deriving from considerable experience in the clinical neurosciences. The aim of the book is that the reader should understand exactly how to undertake appropriate neurophysiological investigations. The book addresses the scientific principles, both biological and electrical,

recording techniques, the development and characteristics of electrical potentials in normal subjects, and the ways in which these are disturbed by physical factors or disease.The impact of digital technologies and the possibilities of quantification, statistical treatment and advanced signal processing techniques, including expert systems, have enabled practitioners to work to much more rigorous scientific standards. The increasing availability of such tools in daily clinical work, together with the broad understanding of computers amongst all staff, means that patients can now benefit from investigations of known specificity and sensitivity. At present there is a lack of good solid text that addresses the peculiarities/limitations/advantages/calibration etc of the digital instruments.Growth in clinical applications is reflected by extended and well referenced sections on nerve conduction studies, electromyography, evoked potentials, EEG and EEG analysis, monitoring of epilepsy for surgery, recording in the neonatal and paediatric patient, monitoring during surgery and intensive care, sleep studies and magnetoencephalography. There are also balanced reviews of the use and abuse of techniques, training of staff and medico-legal issues together with advice on the setting up and running a department of clinical neurophysiology and an integrated digital clinical neurophysiological laboratory including telemedicine.Techniques In Clinical Neurophysiology - A Practical Manual provides a comprehensive guide for practicing neurotechnologists and those working towards higher qualifications, clinical scientists - including neurophysiologists and neuropsychologists - and is relevant to biomedical engineers involved in design of equipment.It is an exciting time in clinical neurophysiology and it is intended that Techniques In Clinical Neurophysiology - A Practical Manual will facilitate the changes that are taking place.Full-color illustrations and tables summarize key concepts and information.Material prepared by international multidisciplinary team of leading experts offers insight and expertise in all aspects of the discipline.Balanced reviews examine the use and abuse of techniques, staff training, and medico-legal issues.Advice is provided on setting up and running a department of clinical neurophysiology, as well as an integrated digital clinical neurophysiological laboratory - including telemedicine.Well-referenced sections reflect clinical applications through discussions of nerve conduction studies, electromyography, evoked potentials, EEG and EEG analysis, monitoring of epilepsy for surgery, recording in the neonatal and pediatric patient, monitoring during surgery and intensive care, sleep studies, and magnetoencephalography.Content addresses the uses, limitations, advantages, calibration, etc. of digital instruments.Chapters discuss the impact of more rigorous scientific standards associated with digital technologies and the possibilities of quantification, statistical treatment, and advanced signal processing techniques.

....this is an excellent volume. It is well thought out in its organization and level of explanation. The substantial use of illustrations, including many in color, are a definite asset to showing, not just explaining, the key points. This will become a classical book necessary for all clinical neurophysiology laboratories, important reading for technologists, and a key resource for physicians training as clinical neurophysiologists. I shall ask all my trainees to read this book cover-to-cover.Marc R. NuwerClinical Neurophysiology, UCLA Medical Center,Reed Neurological Research Center,Los Angeles, USAWith such a well written, concise and comprehensive book, it is difficult to select any one topic to highlight for review. This is an up-to-date, concise book which will be an useful reference for practicioners and an invaluable aid for training - it is more compact than earlier volumes, and is not so heavy! Highly recommended.The Journal of Electrophysiological Technology, 2006About the AuthorRaymond Cooper, BSc, PhD, Former Scientific Director, Burden Neurological Institute, Bristol, UK; Colin D. Binnie, MD, FRCP, Department of Clinical Neurophysiology, Guy's, King's and St. Thomas' School of Medicine, King's College Hospital, London, UK; and Richard Billings, PhD, MSc, Head of School of Medical Technology, City of Westminster College, London, UK