

welcomes modifications, and alternative definitions, to improve the dictionary. I think that this is an excellent start.

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ALCOHOL AND ALCOHOLISM – EFFECTS ON BRAIN AND DEVELOPMENT. 1999. Edited by John H. Hannigan, Linda P. Spear, Norman E. Spear, Charles R. Goodlett. Published by Lawrence Erlbaum Associates. 292 pages C\$97.93 approx.

This book gives a comprehensive account on studies in the effect of alcohol on the developing brain. Every chapter is clearly written with a good summary which explains the current status of knowledge related to the topic. The first two chapters discuss the deleterious effects of alcohol on the structural and neuropsychological development of the brain as well as the risk factors for brain damage. This leads naturally into the next chapter on studies in neuroplasticity. The following chapters on temporal windows of vulnerability, modulation of GABA receptor-gated ion channels, as well as genetics leave many open-ended questions. Based on animal models, the next four chapters have more clinical relevance which might provide more insight into adolescent drinking problems, alcohol deprivation, alcohol transfer to milk and its interaction with infants, as well as the alteration of drug responsiveness in infants by alcohol. There still exists a question of how to relate these animal studies to humans. The chapter on treating individuals with alcohol problems, though well-written, is somewhat incongruous in the context of this book. There is a large jump from various animal studies on alcohol-related neurodevelopmental disorders to practical rehabilitation management of alcohol abuse in the human. Though it is well-appreciated that prevention of such disorders may be achieved by treatment of women with alcohol abuse, this chapter does not appear to relate to any of the previous chapters.

As a reader, I would like to see more illustrations on the neuroanatomical defects and more diagrams or images (such as microscopic sections, in-situ hybridization photographs, etc.) related to various experimental designs. The graphical presentations in this book are all line graphs and bar graphs, some of which are complicated and difficult to interpret.

Overall, the book provides a complete review on the current animal models for studies in alcoholism. It is a useful reference for those interested in the field and it provides useful information for physicians who manage patients with problems of drug abuse.

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MULTIPLE SCLEROSIS THERAPEUTICS. 1999. Edited by Richard A. Rudick, Donald E. Goodkin. Published by Martin Dunitz Publishers. 592 pages C\$227.05 approx.

The advent of disease-modifying therapies for relapsing - remitting MS in the early 1990s represented a watershed in MS management: gone was the therapeutic nihilism of the past, replaced by hope that further major therapeutic advances against MS would occur in the near future. In its 574 indexed pages and 40 multi-authored chapters, this book comprehensively reviews the field of

MS therapeutics and partially fulfills this expectation. All aspects of MS treatment are covered including the use of interferons and glatiramer acetate in relapsing-remitting disease as well as chapters on primary and secondary-progressive MS and symptomatic management. The scope of the book is much broader than this, as it also contains detailed chapters on MS clinical trial methodology, measures of impairment and disability, neuropsychological function, quality of life, MRI measures of disease burden and activity and many other more obscure aspects of MS therapeutics.

I believe this is the most comprehensive book written to date on this subject. Each chapter is well-referenced and the index is more than adequate. Like all multi-authored texts, there is a certain unevenness in style from one chapter to the next as well as opinions between authors on specific subjects which are at times discordant. However, since most issues in the management of multiple sclerosis are open to debate, this discordance is a reflection of reality.

Particularly strong chapters in this book which are essential reading for any MS-oriented neurologist include the preface by Dr. Henry McFarland, chapter 1 on clinical trial design by Richard Rudick and Donald Goodkin, chapter 9 on magnetic resonance spectroscopy by Dr. Douglas Arnold and Paul Matthews and chapter 19 on MS Pathogenesis by Bjorg Oxenborg and Steven L. Hauser.

Unfortunately, the article on the management of relapsing-remitting MS, arguably one of the most important in terms of its practical effect on patient treatment practices regrettably departs from the strictly evidence-based style of the other 39 chapters, in favour of the personalized perspective of its author Dr. E. Frohman. To quote "The therapeutic approach described in this chapter represents the opinion of one dedicated MS physician. In some instances there is little literature-based evidence to support opinions" (p416). That is certainly correct.

For example, he strongly endorses the early and indefinite use of disease-modifying therapy "in all patients with a confirmed diagnosis of RRMS or SPMS" (p 427), or even first attack patients with multifocal MRI changes (p 426-7). The importance of adequate dosing with interferons is down-played. The recommendation that patients on disease-modifying therapy not stop treatment until they are actually pregnant (p 435) seems risky: by the time this fact is established, most women are well into their first trimester and the safety of these drugs in pregnancy has not been established.

Other quibbles include no mention of the risk of potentially fatal hepatotoxicity from pemoline in the chapter on fatigue management [ch 34], and no mention of surgical approaches to the management of spasticity [ch 35].

Overall, this is a very good, comprehensive reference work on MS therapeutics, of interest to all neurologists who deal with patients with MS, and a must-have item for 'MS-ologists'.

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SLEEPMEDICINE. 1999. Edited by Michael Aldrich. Published by Oxford University Press, Inc. 382 pages C\$176.00 approx.

This volume provides accurate knowledge for evaluation and treatment of patients with sleep abnormalities, based on fresh sleep and chronobiological research underpinnings to provide a better understanding of sleep mechanisms. The first part describes all aspects of normal sleep including phenomenology, physiology,

neurobiology, ontogeny, the biological basis of the circadian timing system and the environmental photoperiodic cues (zeitgebers), critical in the management of sleep disorders and medical conditions associated with sleep disturbances. Each basic theme is illustrated with self-explanatory tables, figures and exceptionally clear polygraphic recordings in six chapters.

The second part presents a clinical approach to the specific semiology and medical history along with the current biological basis of normal and abnormal sleep to assist the specialist in the diagnosis and clinical management of sleep abnormalities, chronopathies and other medical disorders associated with perturbation of sleep. An orderly presentation of sleep pathology – from insomnia to narcolepsy – and the increasing number of chronopathies – from jet lag to shift work sleep disturbance-recreates the clinical method. Special attention is given to central sleep apnea and hypoventilation during sleep- from sudden infant death syndrome to hypoventilation associated with neuromuscular disorders. Periodic limb movement disorder, parasomnias, sleep disorders associated with psychiatric and degenerative conditions as well as sleep disturbances in ischemic heart, chronic lung and gastrointestinal diseases, rheumatologic and chronic renal failure are also carefully studied. Disorders affecting the brain stem and diencephalon such as encephalitis lethargica, Prader-Willi syndrome and structural lesions with associated sleep abnormalities are discussed, before closing with the sleep-epilepsy interaction observed in focal-temporal or extratemporal- seizure disorders and generalized epilepsies, documented with video-EEG-polysomnography. All fourteen chapters include polysomnographic results and laboratory tests to assist the specialist in redefining the clinical picture followed by the treatment selection. In summary, each chapter is a systematic account of the most salient clinical

features illustrated with a case history, functional investigations, epidemiological data, biological basis, diagnostic evaluation, management, conclusions and a solid list of new and classic bibliography.

Professor Aldrich, from the University of Michigan Medical Center, presents to us – exactly 10 years after Principles and Practice of Sleep Medicine written by his mentoring editors – the state of art in the field of sleep and its disorders, that in his own words, probably has been part of the medical practice since the time of the first shamans and healers. The recognition of their existence and the constitution of professional Sleep Associations worldwide, however, is contemporary given the variety of sleep pathologies that require specific clinical management, and most likely due to the epidemiological dimensions in 1916 and I might add, since Thomas Edison's invention, the industrial revolution and its social contribution of risk factors involved in day-night shift schedules, sleep deprivation, human migrations, and more recently, the rapid travel across time zones. Sleep is indeed the biologic aspect that reminds us all that we live in a geophysical oscillatory environment, from which, during evolution, we have attained and hardwired our circadian timing system, which is a unique form of adaptation to the incessantly 24 hour photoperiodic variation.

This volume that shines in knowledge and single editor harmony is highly recommended to neurology trainees, the new generation of sleep specialists, adult and pediatric neurologists, nurse specialists, pulmonologists, neurophysiologists, scientists, and physicians in general, for whom it has become clear that the human body functions differently when asleep.

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