

MULTIPLE SCLEROSIS. 1996. Edited by Jurg Kesselring. Published by Cambridge University Press. 214 pages. \$C78.00 approx.

This publication is a comprehensive textbook dealing with the topic of multiple sclerosis including pathology, immunopathogenesis, clinical and laboratory features, patient management issues, rehabilitation and pharmacological therapy. The book is reportedly aimed at internists, neurologists, therapists and neuroscientists and certainly there are aspects of the book that could apply or be of interest to each of the named groups. The most appropriate target group given the scope of the work would be neurologists with a particular interest in multiple sclerosis. However, as discussed subsequently, certain weaknesses in the text may limit the utility of this book for that particular target group. For individuals not needing the most recent information on MS, such as internists and general neurologists and therapists, this book might be better suited.

The strengths of the text include the very broad range of topics covered including historical and epidemiological aspects as well as items of rehabilitation and problems with topics that receive less attention in neurology text books such as sphincter and sexual dysfunction and general patient management issues. Additionally, the background information in each of the chapters is generally quite good and for this reviewer provided the items of most interest.

The weaknesses stem from the fact that the book appears to be somewhat dated for publication in 1997. Many references are several years old with many dating into the 1980s when more authoritative articles or review articles are available that have been published since 1990. There almost seems to be a cut-off time of 1993 or 1994 for the most recent reference except for occasional abstracts and paragraphs that appear to have been pasted on to the end of a previously prepared chapter. If this appears that the text has been written for the most part, 3 to 4 years ago and thus misses some of the very important advances within the last 3 to 4 years. Obviously with a 1997 publication date one would not anticipate references from the current year but might expect some from earlier in 1996 and certainly more references from 1994/95. The issue of referencing also serves as a slight irritant during the review of the book since certain references occur in the text that are not in the list of references or some are listed in the text with a year but then in the bibliography as "in press".

With reference to specific chapters, the pathology chapter was possibly overly detailed for the audience and would have benefited more from illustrations rather than the hard to interpret pathologic sections provided. Surprisingly there was little about viral models of demyelination in the pathology section. The epidemiology section was a bit dated and did not have much of the more recent information nor even a reference to a major review paper on this topic published in 1993. The section on pathophysiology was a bit short and possibly could have been combined with some of the electrophysiologic section from chapter 8. Chapter 8 surprisingly spent a huge amount of space on evoked potentials which arguably have become much less important in diagnosis of MS. Fully 10% of the entire book is devoted to this topic which appears unwarranted. The clinical chapter has some unusual controversial statements such as commenting that INOs are rare in MS (page 71), that clearly discernible sensory level on the trunk is rare (page 73), that reduction in vibration sense can occur with ALS and a statement about optic neuritis occurring in winter leading to an MS risk of 3 fold that of

occurring at other times. The chapter on prognosis fails to make reference to data by Sadovnick and colleagues on survival in MS and the cause for death in MS patients from 1991 and 1992. Again this information should have been available to the authors prior to publication.

The 3rd part of the book deals with management and treatment and the authors are to be congratulated on their comprehensive dealing with rehabilitation and symptomatic therapy although it is surprising to see no mention made of oxybutynin in the management of bladder dysfunction which must be the most common medication used, at least in North America for this disorder. The other unusual aspect was the attribution of a beneficial effect for certain dietary components on the disease course as well as the possibility of disease being caused by certain dietary factors. These issues are at best controversial and the way they are dealt with in this particular text is not appropriate based on scientific evidence.

The final chapter on specific therapy is the best chapter in the book in terms of organization, content, completeness and up to date information.

This book has a number of strengths but these at times are offset by weaknesses in the manuscript. It is not clear that this text book adds significantly more than some of the standard MS textbooks that are available to clinicians. The book would be improved by more up to date data and some tighter oversight of contributions by some of the authors.

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CD-ROM, ANATOMY OF NERVES AND MUSCLES. 1996. By Jean-Marie Peyronnard and Louise Charron. Published by Micro-Intel. \$C300.00

This CD-ROM contains over 2000 original anatomical drawings showing the detailed anatomy as well as the function of virtually all of the different muscles in the body. Animated sequences show the function of the different muscles. The program is intended for medical students, clinicians dealing with neuromuscular disease, surgeons and paramedical personnel such as physiotherapists, etc. I found that the program was well organized and easy to use and I was able to find my way through it quite readily without consulting any documentation. The coverage is quite comprehensive and the anatomical detail is extensive. There is a series of screens pertaining to each region and it is possible to work through the regional anatomy layer by layer. One has the option of seeing labels but these can be turned on and off at the click of a mouse, which allows one to perform self-testing. Short musical sequences and a narrator's voice accompany some of the initial screens but the option is available to turn the sound off. The program functioned very well on my Pentium 133 machine with an 8x CD-ROM and 24 megs of RAM with Windows 95 as the operating system. The PC and MAC versions are included on the same CD-ROM. Useful features are the Find function and the Index which allow one to locate any muscle or nerve rapidly.

The success of what is essentially an electronic anatomical atlas will depend on the quality of the drawings and labels and on the ease of manipulation of the material. On both counts this program succeeds. The drawings are very clear and the labels are quite complete. The program is exceptionally easy to initiate in that it ran

automatically off the CD-ROM without any installation or setup required with my Windows 95 operating system. However at times I found the labels hard to read because of overlap of the black print with a dark background and on such screens, light-colored or white print would have been much more legible. There are a few changes in design which could make navigating through the program a bit easier but on the whole, I found no problem in working through the material in an efficient and rapid way. For example, on a sequence of screens pertaining to a particular region, it would have been nice to be able to return to the initial screen with a click of a mouse rather than having to backtrack through each screen individually or go to the Main Menu. The Zoom In and Zoom Out feature was useful for focusing down on a particular area. It would have been better to have the labels appear for all subsequent screens, once they were asked for for any individual screen in a sequence.

The ultimate challenge for programs such as this depends on whether they provide more than a printed atlas could provide, in other words, whether they make full use of the interactivity potential of MultiMedia. In this area the program only partially succeeds. The anatomical drawings could easily have been made available in

a print format but certainly the rapid accessibility with the Search and Index features offers some advantage. The ability to turn the labels on or off allows for easy self-testing. The most innovative feature, however, is the animated sequences showing the functions of individual muscles, which firmly fix their actions in memory. I would have liked to have seen some Hot Links in the program and some self-testing features with feedback built into the program. The program would also be more useful for clinicians if some clinical aspects including functional consequences of various nerve lesions could have been included. Another very useful feature would have been the ability to print the various screens.

On the whole, despite its fairly high cost of \$300.00, I would recommend this program for the intended audience. It certainly will be of use to medical students or anybody studying general anatomy of neuro-anatomy in any detail. Surgeons of various types and any clinicians dealing with neuromuscular disease, in addition to certain types of paramedical personnel, would also find this program very useful.

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