

Book Reviews

VASCULAR DISEASE OF THE CENTRAL NERVOUS SYSTEM, 2nd Edition, R.W. Ross Russell. Churchill Livingstone, London, 1983. Canada-Academic Press Canada, 55 Barber Green Road, Don Mills, Ontario M3C 2A1. Canadian Price: \$117.00.

This is the second edition of this comprehensive, multi-authored text which was initially published in 1976 with the title "Cerebral Arterial Disease". Its present format is 24 chapters and 486 pages (an addition of 170 pages and 10 chapters). The present volume covers in considerable depth medical and surgical aspects of vascular disease together with equally important topics of natural history, epidemiology, pathology, rehabilitation, and experimental aspects.

The organization, format and many of the contributors are unchanged from the first publication. Of fourteen chapters in the first volume, twelve have changed very little. New chapters include those on ischemic cerebral edema (the chapter was previously published in *Stroke* in 1979), coma in ischemic cerebral disease, vascular disease of the cord, angioma and fistula together with chapters on the extremely important topics of cardiac and haematological aspects of vascular disease and that of stroke prevention. With the additional ten new chapters, there is a considerable overlap of topics.

Particularly informative are chapters on stroke prevention, cardiac and haematological causes of stroke, less common varieties of cerebral arterial disease, vascular disease of the cord, and the discussion of brain death.

Radiography as well as charts are of very high quality and add significantly to the text. The bibliography is extensive containing many classic references. However there is a need to supplement the material with a more recent literature review.

Despite the above comments, one cannot fault the authors for expertise and for a practical approach. The scope of the book is wide but not encyclopaedic. It is well written with direct and clear language and it is sufficiently detailed to be considered a handy and practical reference for those interested in the neurosciences.

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CEREBRAL VASCULAR DISEASE. Edited by Michael J.G. Harrison & Mark L. Dyken (*Neurology* 3). Published by Butterworths International. Pages: 414. Price \$74.95.

Books on stroke are beginning to abound. A second edition of R.W. Ross Russell's "Vascular Diseases of the Central Nervous System" appeared a few months ago. H.J.M. Barnett inaugurated the *Neurological Clinics of North America* with a multi-authored volume on cerebrovascular diseases in February and the new edition of J.F. Toole's "Cerebrovascular Diseases" is about to appear.

The volume reviewed is the third in a new neurology series being published by Butterworths. Harrison is a consultant neurologist at the Middlesex Hospital in London, Ontario, Dyken the professor of neurology at Indiana University in Indianapolis. Both are seasoned clinicians who have made original contributions to the cerebrovascular field. They have distinguished themselves by posing and sometimes answering basic clinical questions and are well qualified to write a book on cerebral vascular diseases.

The book comprises two parts: *Fundamental concepts*, including atheroma, epidemiology, hypertension and stroke, cerebral blood flow and metabolism and pathophysiology of cerebral ischemia and *Clinical applications*, subdivided into sections on ischemic cerebrovascular disease, venous occlusive disease and hemorrhagic cerebrovascular disease.

Sean Moore has written a clear interpretative chapter of the dynamics of atherosclerosis and its clinical implications. John Kurtzke's chapter on epidemiology and risk factors in thrombotic brain infarction is crisp, well organized but in areas of controversy often sports more assurance than proof. The clinical chapters also represent clear summaries of the "state of the art", as the editors intended. The difficulties arise when the reader tries to get guidance on specific cerebrovascular problems. Thus Ginsberg and Cebul in chapter 9 site the contradictory literature on the management of asymptomatic bruits without committing themselves and warning that no management alternative "offers a clear medical benefit without simultaneously conferring increased risk of either short or long-term morbidity and mortality" (p. 241). Upon reaching chapter 11 one can find a more aggressive approach: "asymptomatic patients with pronounced stenosis and reduced retinal artery pressure may be candidates for surgery" (p. 293). In the same chapter Sundt and Dyken advocate temporal artery to middle cerebral bypass surgery partly based on the unreferenced work of two unnamed "teams of investigators" who showed that the cortical perfusion pressure in patients with a chronic internal carotid occlusion was approximately 50% of the peripheral pressure. Following bypass surgery the perfusion pressure increased immediately and the authors speculate that the cortical perfusion pressure would increase further with the delayed dilatation of the graft. Perfusion pressure is but one of the factors affecting cerebral blood flow, which as far as one can tell, was not measured. Moreover, no data were given to support the view that these hemodynamic changes make a clinical difference. The burden of proof should be on those who would make the management of cerebrovascular disease more complex, costly and hazardous.

Ross Russell's book remains the best reference on cerebrovascular diseases, Barnett's the best update and value (\$14.40) and Harrison and Dyken's book provides a well balanced and comprehensive approach. Their shortcomings reside in the inherent unevenness and contradictions of multi-authorship.

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MULTIPLE SCLEROSIS EAST AND WEST, Edited by Yoshigoro Kuroiwa and Leonard T. Kurland, published by Karger University Press. 398 pages. \$118.75 U.S.

One of the most remarkable features about multiple sclerosis is the extraordinary geographic distribution. Information on the Oriental occurrence of MS is sparse, although early reports suggest that a low frequency and differing clinical characteristics from that in the West. This volume edited by Dr. Kurland, the distinguished MS Epidemiologist and Dr. Kuroiwa who has been largely responsible for the intensive study of MS in Japan and elsewhere in the Orient represents the proceedings of the Asian multiple sclerosis workshop and the satellite symposium on multiple sclerosis held in September of 1981.

The book is fascinating in several respects, and presents data from several Asian countries. It seems reasonably clear that multiple sclerosis is rare in Asian countries and when it

occurs it has relatively different characteristics, both clinically and pathologically. Asian M.S. patients are much more likely to have an optico-spinal form of the disease and pathologically to show a relative lack of inflammatory cells and negative CSF studies. These observations bear directly on the growing suspicion in the minds of many investigators that MS is characterized by heterogeneity, some of it genetic. The different distribution of MS pathology in the Orient brings to mind the rather different features of cerebral vascular disease in Japan compared to North America (e.g.: relative differences in frequency of carotid stenosis and middle cerebral artery disease).

Reports on occurrence of MS are presented from Japan, Korea, China, Philippines, Thailand, India, Hungary, Hawaii, Sicily and Malta. With respect to the latter two locations Dean makes the remarkable observation that the frequency of MS in Sicily is many times that in Malta even though the two islands are separated by only 60 miles.

This book will appeal mainly to individuals whose main interest is in demyelinating diseases but it will likely make a valuable addition to institutional libraries. The cost of the book (\$118.00) will likely limit its distribution.

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CONGENITAL ABNORMALITIES OF THE OPTIC NERVE AND RELATED FOREBRAIN, by Thomas E. Acers, M.D. Lea and Febinger. Philadelphia. 1983. 75 pages. Price \$18.15 Cdn.

This brief synopsis was written by an ophthalmologist after insufficient consultation with a neuropathologist. The author states in the preface that he does not "intend this book to be an encyclopedic treatise . . ." and indeed he keeps his word. The brief and shallow discussion of the collection of

unrelated disorders he has selected is not in itself the weakness of the book; rather the author's inaccurate correlation of ocular and neuropathologic findings and his oversimplified explanations of the embryologic bases of the malformations nullify his laudable efforts. The many omissions of important recent advances further exaggerate many of the erroneous premises.

Chapter 5 is supposedly devoted to holoprosencephaly. Not one of the four illustrations of computed tomograms and gross pathologic sections of brain actually demonstrates holoprosencephaly. Crouzon's and Apert's syndromes are briefly mentioned as associated disorders, but neither has ever been reported radiographically or neuropathologically to exhibit holoprosencephaly. Chapter 6 on septo-optic dysplasia fails to cite the several studies in the past few years showing extensive cerebellar dysgenesis in this disorder, but does note pituitary involvement in some cases. Brief discussions of vascular anomalies and "phakomatoses" are limited to the ocular findings.

Chapter 7 is entitled 'Congenital Ophthalmoplegia Plus' and notes that it is associated with ". . . spinocerebellar ataxia, limb-girdle myopathy, heart block, cardiomyopathy . . . and aminoacidopathy syndromes." The metabolic basis of the disease, a systemic mitochondrial disorder, is nowhere mentioned despite the numerous publications of the last decade. A table cites a reference to a paper by Drachman (1968), but the author then forgot to include the citation among the references at the end of the chapter.

In sum, this book is poorly researched and shallow in depth, apart from the author's conscious effort to be brief and concise. It does not provide ophthalmologists with the neuropathologic correlation it purports to do, and would be of little value to neurologists seeking correlation with ocular pathology. I cannot recommend it.

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Books Received

CONGENITAL ABNORMALITIES OF THE OPTIC NERVE AND RELATED FOREBRAIN, 1983. By Thomas E. Acers, M.D. Published by Lea and Febiger. 75 pages. \$18.25 Cdn.

CEREBRAL VASCULAR DISEASE (BIMR NEUROLOGY 3), 1983. Edited by Michael J.G. Harrison and Mark L. Dyken. Published by Butterworth. 414 pages. \$59.95 U.S.

DEMENTIA — A CLINICAL APPROACH, 1983. By Jeffrey L. Cummings and D. Frank Benson. Published by Butterworth. 416 pages. \$34.95 U.S.

EPILEPSY: AN UPDATE ON RESEARCH AND THERAPY. SERIES: PROGRESS IN CLINICAL AND BIOLOGICAL RESEARCH, 1983. Vol. 124. By Nistico Giuseppe, Raoul de Perri and H. Meinardi. Published by Alan R. Liss, New York. 396 pages. \$76.00 U.S.

BASIC MECHANISMS OF NEURONAL HYPEREXCITABILITY, 1983. SERIES: NEUROLOGY AND NEUROBIOLOGY. By Herbert H. Jasper and Nico M. Van Gelder. Published by Alan R. Liss. 512 pages. \$96.00 U.S.

PROGRESS IN CLINICAL NEUROPHYSIOLOGY, Vol. 10 **COMPUTER-AIDED ELECTROMYOGRAPHY**, 1983. Edited by J.E. Desmedt. Published by Karger, Switzerland. X + 334 pages. \$99.00 U.S.

CLINICAL AND BIOLOGICAL ASPECTS OF PERIPHERAL NERVE DISEASES. SERIES: NEUROLOGY AND NEUROBIOLOGY, VOL. 4. Edited by Leontino Battistin, George A. Hashim and Abel Lajtha. Published by Alan R. Liss Inc., New York. 402 pages. \$48.00 U.S.