Dr. Gooddy has given us a fascinating insight into our concept of time, and into ourselves. It was worth the quarter century wait.

T.J. Murray
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CONTROL OF HEAD MOVEMENT 1988. By Barry W. Peterson and Frances J. Richmond. Published by Oxford University Press. 322 pages. $71.95.

This book is the result of a satellite symposium of the XXX Congress of the International Union of Physiological Sciences held in 1986. However, the editors rightly point out in the Preface that this book is not merely a collection of symposium proceedings. The book has been well and exhaustively edited, so that the twenty chapters, mainly written by authorities in the field, form a harmonious and relatively comprehensive volume. Most of the chapters are reviews on single topics related to the control of head movement. Early chapters in the book deal with basic structures underlying the control of head movement, including chapters on the joints and muscles of the neck, on the cervical motoneurons, and on the sensory receptors in cervical muscles and joints. These are followed by, among others, chapters on the cervicocollic and cervicoocular reflexes, the tonic neck reflex, and the cerebellar pathways contributing to head movement. Finally, the book concludes with more integrative chapters, as for example, chapters on control of head movement during visual orientation, on head movement models, and on clinical disorders of head movement.

This book has a very definite basic science orientation, and is directed primarily at the question "How does the CNS control had movements?" Only a few chapters deal with clinical material, and these are relatively superficial with regards to descriptions of clinical syndromes. With 42 pages of references, however, this book is an exceptionally well organized and well referenced multi-author discussion of the control of head movements. Those interested in motor control research will find it a very useful reference that deals not only with head movement, but also touches upon many basic and new concepts in motor control.

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NONINVASIVE IMAGING OF CEREBROVASCULAR DISEASE, Volume 5, First Edition. Edited by Jesse Weinberger. Published by Alan R. Liss, Inc. 202 pages. $72 Cdn.

This book is Volume 5 in the series "Frontiers of Clinical Neuroscience" and includes contributions from 16 contributors. The editor states in his preface that the "purpose of this volume is to provide the clinician caring for stroke patients with a working knowledge of current noninvasive techniques employed to visualize the pathophysiology of cerebral ischemia without exposing the patient to risk." In general terms, this book has been successful in accomplishing this goal.

The book is well-organized, concentrating on evaluation of extracranial causes of ischemia, in the first 4 chapters. The next 4 chapters deal with noninvasive evaluation of the intracranial

vessels and structures. The final chapter deals with intraoperative monitoring of cerebral blood flow and EEG during carotid endarterectomy.

With the exception of the chapters of CW Doppler sonography and transcranial doppler, the text is concise, well-written and readable. Generally, a brief introduction to the basic principles is presented at the beginning of each chapter as a basis for understanding that particular imaging modality. Subsequently, normal and pathologic findings are presented, described and illustrated. The images included are of good quality, illustrative and well-labelled. Unfortunately, the color images from several modalities are included together in a Color Figure Section. These figures would have been more helpful had they been placed in the particular section where the modality was discussed, to save checking back or forth to the Color Figure Section.

The chapters on CW and transcranial doppler sonography are lengthy and difficult to read and follow. The level of technical expertise required to perform these examinations is obviously considerable and is described in detail in these chapters. This detail about technical features of the examination is important to recognize, as is the potential for misinterpretation of the studies related to technical factors, but the level of detail about the technique itself is not necessary in an overview such as this and leads to boredom in the reader. The important clinical aspects of the techniques are overshadowed by the technical explanations.

Each chapter concludes with an extensive list of references, giving the reader a good opportunity to do further reading should he (she) wish.

I would recommend this book to physicians, both those in training and those who are fully qualified, who are involved in the diagnosis and treatment of patients with cerebrovascular disease. Nurses and technicians working in the field of noninvasive testing for cerebrovascular disease will also find this volume interesting.

Mary Ann Johnson
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CEREBROVASCULAR DISEASE. First edition. By Masakuni Kameyama, Masanori Tomonaga and Tadashi Aiba. Published by Igaku-Shoin Ltd. 178 pages. $88.50. Cdn.

Japanese contributions to the literature on stroke have increased steadily both in quantity and in quality. Three distinguished investigators, a neurologist, a neuropathologist and a neurosurgeon have edited a volume on cerebrovascular diseases especially as they relate to Japan and to geriatric populations. The chapters include an historical survey, criteria for cerebrovascular disease, the collateral circulation, cerebrovascular disease in the elderly, etiology, cerebrovascular syndromes, rare forms of cerebrovascular disease, diagnostic modalities, prognosis and therapy.

Cerebrovascular disease no longer is the most common cause of death in Japan, having been superseded by cancer and cardiac diseases. However, it remains a leading cause of mortality and morbidity and likely to remain so, given the marked prolongation in life expectancy in Japan and the sharp rise in the incidence of stroke with increasing age. An advantage of this book is that it brings together major studies in cerebrovascular