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BOOK REVIEW

Neuroimaging Clinics of North America: Angioplasty and Stenting for Atherosclerotic Cerebrovascular Disease, Vol. 17, No. 3

C.P. Derdeyn, ed. W.B. Saunders; 2007, 111 pages, \$97.00.

This book is a collection of highly valuable articles addressing cerebrovascular atherosclerotic disease. Dr. Derdeyn and his coauthors have done a thorough job of addressing the basic pathophysiology, clinical indications, and technical considerations in understanding and treating this disease. As the field of neuroendovascular therapy is advancing, we are able to make a greater impact on one of the most debilitating diseases of modern society: atherosclerotic disease and stroke. To treat this ever-growing patient population, neuroendovascular practitioners need to understand not only the technical aspects but also the basic pathophysiology of cerebrovascular disease and the interactions of the devices we use with the human vasculature.

This book is divided into 4 main sections. The first section deals with basic pathophysiology and contains 3 informative articles. The first of these articles, written by a world-renowned pathologist, deals with the histopathologic processes of cerebrovascular atherosclerosis and the biologic responses to stents on the cervicocranial vasculature. This article was inspired by her pioneering work on coronary vessel stent placement. The second article in this section, contributed by the guest editor, deals with the mechanisms of ischemic stroke secondary to large-vessel disease. It is an informative article on the basics of cerebrovascular hemodynamics and the mechanisms of compensation. The article reviews thromboembolic and hemodynamic disease along with imaging tools to diag-

nose and understand these differing mechanisms of stroke. The third article in this section deals with the emerging topic of neurocognitive compromise and its implications in our practice. It is a review of the literature-based evidence and mechanisms of ischemia leading to neuronal impairment.

The remainder of the book addresses atherosclerotic disease and its treatment on 3 locations: the extracranial carotid artery, the intracranial vessels, and the brachiocephalic/vertebral arteries. The second section on the extracranial carotid artery consists of 2 articles. The first article addresses current clinical indications, imaging, and a review of the body of evidence supporting treatment. The second article is a complete technical cookbook of the technique of carotid stent placement and the use of the various devices including distal protection.

The third section explores the treatment of intracranial atherosclerosis and its indications. It consists of 2 articles, the first of which is a review of the clinical trials published to date. This article is written by the principal investigator of the Warfarin-Aspirin Symptomatic Intracranial Disease trial and reviews the epidemiology and pathophysiology of intracranial atherosclerosis. It also presents a rationale for a randomized clinical trial for the efficacy of intracranial stent placement.

The final section consists of 1 article, which addresses the clinical indications and techniques of stent placement of the brachiocephalic and vertebral arteries.

This collection of articles addresses cerebrovascular disease on many levels. It caters to the modern neuroendovascular practitioner, whether the practitioner is still in training or looking for an update on the latest techniques and literature. The sections are written in a to-the-point, concise manner by some of the world experts on the particular topics discussed. Dr. Derdeyn and colleagues do a wonderful job in explaining the rationale for treating cerebrovascular disease.

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