BOOK REVIEWS

John M. Porter, MD, Book Review Section Editor

Vascular disorders of the upper extremity, 2nd edition

The second edition of this book has been enlarged considerably to include new information on noninvasive diagnostic methods, arteriography, complications, and electrodiagnostic approaches and expanded coverage of the thoracic outlet syndrome. An excellent chapter is included on “Upper Extremity Manifestations of Systemic Vascular Disorders” that has 604 listed references.

Much of the information in this book will not be particularly new because many of the principles of arterial and venous obstruction seen in the arm are also seen in the leg. The approach to both diagnosis and treatment of these problems is standard and familiar to most vascular surgeons.

The thoracic outlet syndrome continues to be difficult, particularly in terms of making a firm and accurate diagnosis and planning treatment. The true vascular complications are relatively uncommon and can be dealt with in a straightforward manner, particularly on the arterial side of the circulation. However, when we deal with the nonvascular complications of the thoracic outlet, few tests exist that permit us to make a firm diagnosis, and even fewer tests exist to determine the effects of therapy. This has been the major frustration that most of us have had in approaching these patients. Furthermore, the documentation of anatomic abnormalities producing the compression is difficult except in the cases in which a cervical rib is noted. As noted in the text, although surgeons with considerable experience have described some of the abnormalities that lead to compression, they can be documented only at the time of operation. This produces a problem for the surgeon who has limited experience in working in the neck with its complex three-dimensional anatomy. Furthermore, the relationships between the neurovascular and bony structures can be altered drastically by changes in position of the arm and shoulder girdle. These difficulties have been well covered.

The problem of cold sensitivity, digital gangrene, and the large number of systemic conditions that can lead to problems is very well reviewed. The necessity to do a careful search for an underlying contributing condition will be apparent to anyone who has the opportunity of seeing these patients. These chapters should be used extensively as a reference source.

Because many of the problems associated with the upper-extremity vascular disorders are not covered well in many texts, this book should be on the shelf of anyone interested in this area.

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The foot in diabetes

The stated purpose of this book is to present in one volume current thoughts on the pathophysiology, diagnosis, and treatment of foot disorders in patients with diabetes. The author presents a comprehensive series of topics to achieve this goal. These include chapters on foot mechanics, vascular disease, neurologic complications, infections, and the like. Some of the chapters are very timely and well written. The overview of diabetes mellitus is succinct, practical, and well referenced. The same is true of the chapter on vascular disease, although little emphasis is made of modern techniques of extreme distal reconstruction including bypass to the dorsal pedal artery. Little discussion is included of the timing of arterial reconstruction in relation to management of associated infection or mechanical problems. The chapters on structure of the foot, mechanical stresses, and foot function appear to present the primary interests of the author and are the highlights of the book.

Unfortunately, after reading this book, one does not come away with a cohesive plan for management of ulceration in the diabetic foot. For example, in the chapter on total contact casting, the author states that all plantar ulcers can be treated with this technique. No recommendations are given for pretreatment vascular assessment and when and if arterial reconstruction should be considered. This book presents neither a comprehensive discussion of the pathophysiology of diabetic foot problems nor a logical clinical plan of management.

Vascular surgeons should consider this book for a timely discussion of foot mechanics and structure but not as a modern treatise on vascular disease and its management in diabetes, including state-of-the-art arterial reconstruction.

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Raynaud’s syndrome

Of all vascular problems, functional vascular abnormalities such as Raynaud’s syndrome are the most difficult to diagnose accurately. This monograph brings together predominantly European investigators to provide a fresh view on this subject. The book has three major sections: basic pathophysiology, investigation, and therapy. Of the seven chapters under pathophysiology, chapters 4 and 5 on
α-adrenergic receptors are useful, with new information. The chapter on pathophysiology of cold hypersensitivity gives a comprehensive review on the subject. Although it is important for readers to understand endothelial-derived relaxing factor and vascular spasm, the chapter on this subject is disappointing, because the role of endothelial-derived relaxing factor in Raynaud's syndrome is mentioned in a brief paragraph. Chapter 6 on associated diseases is well written, and readers will find the Oregon experience with this syndrome helpful in their practice. Chapter 7 on the effect of female sex hormones on the microcirculation is intriguing. It offers a plausible explanation of why Raynaud's syndrome is more common in women.

The section on investigation consists of five chapters on noninvasive techniques ranging from Doppler ultrasonography to thermography and laser Doppler flowmetry. The chapter on thermal entrainment testing provides new diagnostic information. This technique allows an objective assessment of vasomotor control in patients with Raynaud's syndrome. Of all the chapters in the section, the one dealing with the effect of cooling on digital pressure probably presents the most practical physiologic test for the evaluation of Raynaud's syndrome.

Treatment of Raynaud's syndrome is often difficult. Six chapters are devoted to this subject, and a wide variety of drugs are mentioned. After reading all six chapters, one cannot help but receive the impression that pharmacologic management remains elusive. Most drugs are effective, but convincing objective improvement of blood flow is often not forthcoming. This is obviously the result of multiple factors influencing digital blood flow measurement in this syndrome. One may conclude that all drugs are effective, but none is effective for every patient.

Raynaud's syndrome offers a diagnostic challenge for vascular surgeons. This monograph summarizes the current concepts in pathophysiology, investigation, and treatment of this difficult clinical condition. Seasoned vascular surgeons will find this book informative and interesting. The book is a valuable addition to the field of vascular surgery.

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Surgery, 2nd ed.
Bruce E. Jarrell, R. Anthony Carabasi, III, eds.

This volume is one in a series published by Williams and Wilkins entitled “The National Medical Series for Independent Study” and is intended, according to information on the back cover, “specifically for the medical student who wants to: (a) Master large amounts of information in a limited amount of time; (b) prepare for Parts II and III of the National Boards, FLEX, and FMGEMS.” The book contains 570 pages divided into 29 chapters and was written by the surgical faculty of the Jefferson Medical College. The format is that of an expanded outline, rather than traditional sentences, paragraphs, and sections. The book contains no bibliographic material. Each chapter is followed by a number of study questions; proposed correct answers are given with an explanation, but again, no bibliography. Emphasizing the specific purpose of the book, the last chapter consists of an essay on successful taking of multiple choice examinations.

Problems exist. The organization into chapters is chaotic; some are anatomic (Chapter 5, Chest Wall, Lung, and Mediastinum), some specialty oriented (Chapter 4, Principles of Thoracic Surgery), and some obviously intended to include topics not covered elsewhere (Chapter 9, Common Life-Threatening Disorders). A few chapters have outstanding succinct presentation of the relevant information in highly organized fashion (Chapter 14, Liver, Portal Hypertension, and Biliary Tract, and Chapter 15, Pancreas), whereas others are woefully inadequate (Chapter 28 attempts to cover all of Orthopedic Surgery in 13 pages). There are few illustrations, and they vary in quality from outstanding to misleading (Fig. 7-3, arterial supply to the brain, is grossly inaccurate). There is obvious redundancy (cerebrovascular disease is discussed both under peripheral arterial disease, and under neurosurgery). Some of the authors have been more successful in dealing with the outline form of writing than others; platitudes abound (“The history can provide useful information.”).

In the preface, the editors express the “hope that all readers will find Surgery, 2nd edition, represents a declaration of the state of surgical art in 1990.” I hope not. A textbook of surgery this is not, not by any stretch of the imagination. A useful review tool before an examination it just might be. There really is a tremendous amount of information and our theoretic medical student needing to prepare rapidly for the national board examination might find a careful review of this volume valuable. I suspect that I might even pull it out again myself, in October, just before the General Surgery recertification examination. The low price makes its purchase for this purpose reasonable.

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