



Acute Peripheral Vascular Surgery

Michael Staudacher

*With a Foreword
by Professor Ronald J. Stoney, M.D.*

*With 146 single illustrations
in color (drawings by Wolfgang Rieder)
and 14 black-and-white figures*

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Dedicated to my beloved wife, Monica

Foreword

During the past three decades, Vascular Surgery has emerged as a specialty within general surgery. Fellowships are now available to equip surgeons with specialized skills for managing various vascular problems. Nevertheless, the vascular surgical emergency, one of the greatest challenges in surgical management, may occur suddenly and at a time and place remote from the highly qualified vascular surgeon or a specialized center where complex vascular treatment is routine. The initial evaluation and treatment must be undertaken by a general surgeon who determines the extent, severity, and urgency of the problem at hand, and hopefully will arrange appropriate transfer to a specialized center if the patient's condition permits.

Urgent problems, on the other hand, demand immediate surgical intervention by the general surgeon if any hope for salvage is to occur. It is in this setting that this volume offered by Professor Staudacher may be of assistance to the general surgeon whose experience in this type of emergency may be limited. This concise, well illustrated volume should serve as a guide to manage the peripheral vascular emergency involving either the arterial or venous system.

The five sections are clearly illustrated and the methodology is described in a stepwise fashion for easy reading. The examples of common vascular emergencies discussed in the final section show the application of principles of exposure, identification of the involved vascular structures, and repair in a clear and concise manner. The successful management of these examples employing basic vascular surgical techniques should serve the reader as a model which can be applied to a specific vascular problem that he faces.

The format makes this an attractive, basic reference for the student, surgical trainee, and surgeon who encounters the occasional vascular emergency.

San Francisco, Calif., July 1985

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Preface

Vessels have always instilled an almost mystic awe in physicians. This is in the nature of things, for when large vessels are damaged, it always has serious consequences: the threat of necrosis of parts of the body or a severe blood loss or even bleeding to death. Thus, it is understandable that fellow surgeons who have not had the benefit of basic training in vascular surgery display a certain reluctance towards vascular problems.

Yet, vascular surgery has shown a surge of development since the mid "50"s and today it has at its command a mature basic technique for vascular reconstruction which can be acquired without particular difficulty by any general or accident surgeon – and indeed should be. For if he is unexpectedly confronted with an embolism or some other vascular injury, there is no time to be lost and, if no specialist is available, he must proceed without delay. Such cases are by no means rare. In these cases, he should and could do more than apply a ligature or perform an improvised embolectomy, which will all the more necessitate calling in a specialist, who will then have to repair the damage. None of the participants can be satisfied with this, not the administrator of first aid, not the specialist and certainly not the patient. The best chances of success in acute cases are given only by rapid and correct treatment. Any delay worsens the prospects of recovery.

Nor should we forget situations in which intraoperative iatrogenic vascular injuries occur, for which we must always be prepared. They should not be the cause of panic.

To be equipped for successful vascular reconstruction in such cases, all that is needed is the ABC of vascular surgery and a handful of special instruments.

In this book, the necessary basic knowledge will be described and those instruments will be presented that will put the nonspecialist surgeon in a position to tackle an acute peripheral vascular problem so that he will be able to master it with safety for the patient and to his own satisfaction.

Obviously, not every single one of such cases can be treated in this book. Therefore, we will present the surgical procedures required for the most common and typical diseases and injuries of the peripheral vessels in a

Preface

readily understandable and easily duplicated manner. Our examples should be taken as models that can be transferred to other situations.

Thus, in this context, it is not appropriate to enter into hemodynamic details, special angiographic techniques, faulty diagnoses, etc. Also, we have refrained from giving detailed references to the scientific literature, which can be found in textbooks of vascular surgery as listed at the end of the book, by those particularly interested.

As to the manner of preparation of the material selected, I believe it is particularly suited to convey the essentials. The course of the operation is captured step by step in drawings, and comments are made in caption form. Each series of pictures is accompanied by the diagnosis of the case in question and a list of postoperative measures.

I have omitted photographs of operations, since these contain too much that is nonessential and thus are not suitable for teaching purposes.

Schematic drawings, such as predominate in many other publications, proved to be oversimplified – easy for those familiar with the field but not clear enough for the inexperienced. I have therefore prepared colored in situ pictures myself, which served as models for the outstandingly successful illustrations of our draftsman, Mr. Wolfgang Rieder.

I hope to have contributed with this book to making reconstruction maximally successful in vascular problems and to making them entrustable to nonspecialists in case of urgency.

I wish to extend my heartfelt thanks to Prof. J. Vollmar of the University of Ulm for his advice and for reading the original manuscript.

My very special thanks are due to my highly honored teacher, Prof. Johann Navrátil, Dr. Sc., who opened up the possibility for me to establish a vascular surgical service in his clinic and to collect the experience which I wish to pass on in this book, and who also wrote the foreword to the first (German) edition.

Finally, the generosity of the management of Eli Lilly International Corporation (Indianapolis, Indiana) must be acknowledged, which made the translation possible.

I also wish to thank the tireless secretaries Mrs. Brigitte Blaschke and Mrs. Waltraud Duminger for all their help and work – work which is all too quickly overlooked once all has been completed.

Last but not least I would like to express my special thanks to Dr. Howard F. Floch for reviewing my manuscript so carefully.

Vienna, July 1985

M. Staudacher

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