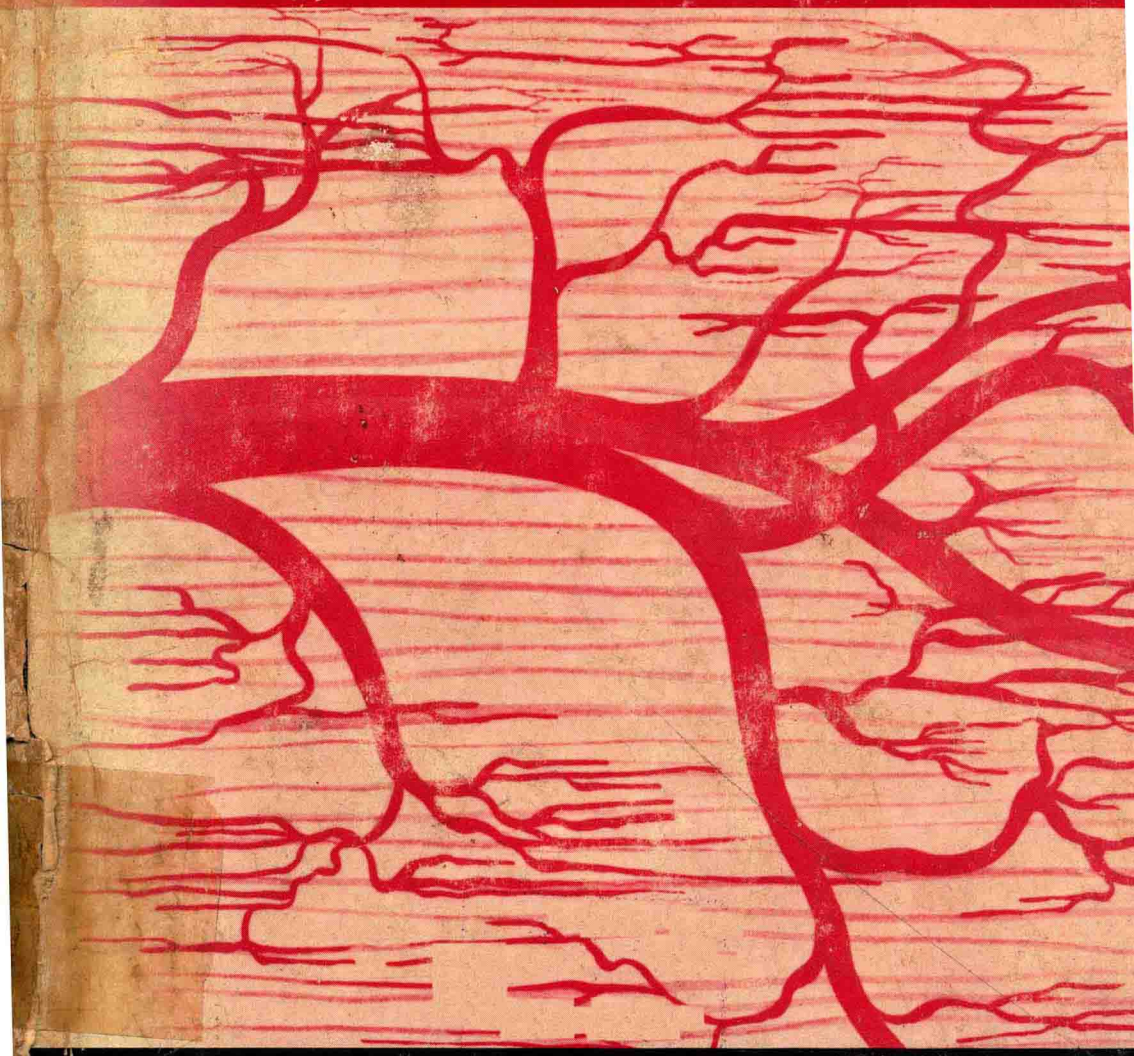
BLOOD VESSELS AND LYMPHATICS

Edited by DAVID I. ABRAMSON



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LYMPHATICS

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BLOOD VESSELS
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Preface

The plan of this volume has been to assemble, consolidate, and interrelate current data on the embryology, anatomy, physiology, pharmacology, biochemistry, and pathology of blood vessels and lymphatics. Information has thus been compiled which has previously been available only through exhaustive and time-consuming perusal of a large number of original papers and review articles, disseminated in a great many journals. It is hoped that the final product will provide a critical, provocative, and authoritative summary of our present knowledge of vascular and lymphatic responses, which will be of value to the research worker and the advanced student in the field and to the specialist desiring background and sources on subjects other than his immediate concern. At the same time, it should help focus attention on the existence of gaps in our knowledge and perhaps act as a springboard for projection and exploration into new avenues and spheres of research.

Since the broad scope of the subject matter precludes its treatment by a single or even several authors, the book has been formulated by a large number of investigators, each of whom has contributed one or several sections, limited to the areas of his endeavor and research interests. In most instances individual chapters have been written by a number of different authors, many of whom have sections in other portions of the book. In order to maintain a certain degree of similarity in format, rigid criteria have been followed with regard to the types of headings and subheadings and to the style of presentation of the material. The task of the Editor has been to integrate and mold the various accounts of the contributors into a systematic and coordinated volume.

At no time have the viewpoints expressed by a contributor been altered. However, the presence of these views in the content does not necessarily indicate that they are those held by the other authors or by the Editor. It has been felt that any hypothesis which is provocative and is supported by substantial experimental and clinical data should be included, even though the available evidence is not sufficient for its unquestioned acceptance. Alternative, and perhaps unorthodox, concepts have also been presented where differences of opinion exist.

It is believed that this approach to the organization of a multiauthored treatise will minimize the objection frequently directed at such a project that the result is not an integrated account but actually a compilation of a large number of papers, designated as chapters, lacking continuity and containing repetition of material and differences of opinion in various portions. Under the present plan, the intimate contact

each contributor has with his field permits a comprehensive survey of available material, with a minimum of speculation and of sweeping generalities. A possible objection is that the subject matter may conceivably be slanted more than is warranted in the direction of the interests of the various authors. However, this would appear preferable to the frequently uncritical evaluation of the literature by an author who has been assigned a subject regarding which he has only a theoretical knowledge.

Because of the large number of subjects considered and the relatively small size of the work, it has been necessary to provide an extensive bibliography of current research, as well as of reviews permitting access to previous papers, in order to produce adequate coverage of the literature. Attention has also been paid to papers beyond national boundaries.

The subject matter has been divided into four parts. In the first part is presented, in broad terms, a discussion of the various types of blood vessels: the large and small arteries and arterioles, the microcirculation, and the venous system. In the second part, the vascular tree in the different organs is described, so as to make readily available to the reader information regarding a specific local circulation. The third part deals with different pathologic vascular states, while the final one is devoted to the lymphatic system. Descriptions of the clinical manifestations of the various disorders affecting blood vessels and lymphatics have not been included, for if this had been done, it would have resulted in an unwieldy volume, at the same time detracting from the intended emphasis on the basic approach to the problem.

I wish to acknowledge my indebtedness to Doctor Geoffrey H. Bourne, who originally pointed out that a book of this type was not available and that such an undertaking would fill a void in our knowledge of the field of vascular responses. I am grateful to my secretary, Miss Naomi McCutcheon, who was involved in the voluminous correspondence required first, in obtaining a large group of contributors willing to participate in the project and second, in supporting them in their determination to complete their assignments within the deadline set up for publication. Finally, I wish to express my appreciation to the staff of Academic Press, for their patience, cooperation, and advice during the preparation of this volume.

DAVID I. ABRAMSON

February, 1962

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