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Anson & McVay
**SURGICAL
ANATOMY**

SIXTH EDITION
VOLUME I

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BARRY J. ANSON (1894-1974)

This book is dedicated to the memory of
Barry J. Anson, M.A., Ph.D. (Med. Sc.)

Late Emeritus Robert Laughlin Rea Professor of Anatomy, Northwestern University Medical School, Chicago, Illinois, and Research Professor, Department of Otolaryngology and Maxillofacial Surgery, The University of Iowa, Iowa City

A true scholar and a consummate gentleman who inspired his medical students and graduate students. He constantly emphasized the importance of basic anatomical knowledge to clinical surgery.

An international authority on the anatomy of the temporal bone and middle ear, whose detailed studies were the basis for the development of microsurgical techniques in the middle ear.

Certainly one of the greatest gross anatomists of this century.

*We are like dwarfs seated on the
shoulders of giants. If we see more and further
than they, it is not due to our own
clear eyes or tall bodies, but because we are
raised on high and upborne by
their gigantic bigness.*

*Bernard of Chartres
Chancellor in 1119*

PREFACE

"In the genealogical history of a dynasty, members of late issue oftentimes tend to bear decreasing resemblance to the patriarchal founder. A comparable circumstance touches the lineage of a book: the connection with the first edition becomes more and more tenuous in proportion to the change in its scientific environment. A stage is reached when authors must take full responsibility for the latest product. Heritage in the hands of complacent heirs soon becomes a possession chronologically out of place, an incongruity in a new age." (From the preface to the fifth edition, by Barry J. Anson.)

My long association with Dr. Anson has made this goal a challenge, although at times a lonely task, and I have greatly missed the guiding hand of my mentor. In the year prior to Dr. Anson's death we corresponded frequently about changes for the sixth edition. We were in complete agreement that the general format of the fifth edition should be continued and that each section should be updated with pertinent anatomic material relevant to newer or changing surgical procedures, without attempting to make this an atlas of surgical techniques.

Many excellent figures from Dr. Anson's *Atlas of Human Anatomy*, published in 1963, have been used in this revision. The customary single frontispiece introducing each part of the book has been expanded to include sequential illustrations from the atlas, usually of dissections of a single cadaver. These beautiful illustrations were executed for the most part by the late Mary Dixon Elder, Medical Illustrator at Northwestern University, and the late Tom Jones, Medical Illustrator at the University of Illinois. Each sequence briefly presents anatomic structure as an introduction to each part of the book.

As in the past, the author has asked a number of authorities to assist him in revising these volumes. Some parts have been extensively revised, while others contain only minimal changes, owing to their complete revision in the fifth edition. The author takes complete responsibility for the rather extensive revision of Part IV, "The Abdominal Wall and the Abdominal Cavity," and the changes obviously reflect the author's interpretation of anatomic structure as it has been observed in the dissecting room and in the operating room over a period of fifty years.

The author wishes to express his appreciation to the following surgeons who have contributed in their fields of special expertise: Dr. William Meacham, Professor of Neurosurgery at Vanderbilt University, for his review of Chapter 1, The Head. Dr. John R. Willcockson, Associate Professor of Ophthalmology at the University of South Dakota School of Medicine, for revision of the section in Chapter 2, The Visual Apparatus. Dr. Oliver Beahrs of the Mayo Clinic, for his review of Part II, The Neck, much of the text and many of the figures of which were his contribution to the fifth edition. Dr. Frank J. Milloy of Chicago, for his revision of the section on the pleurae and the lungs. Dr. Milloy extensively revised this section in the fifth edition, and for this edition he has completely rewritten the section on Surgical Considerations and added a number of his own illustrations to replace or supplement the illustrations of the fifth edition. Like the author, Dr. Milloy was an instructor in anatomy under

Dr. Anson. Dr. David Sabiston, Professor and Chairman of the Department of Surgery at Duke University, for his revision of the section on the middle mediastinum, including the heart, and the illustrations which he supplied. Dr. Brooks Ranney, Professor of Obstetrics and Gynecology at the University of South Dakota School of Medicine, for changes in Chapter 20, Pelvic Viscera in the Female. Dr. Robert VanDemark, Professor of Orthopedic Surgery at the University of South Dakota School of Medicine, for his suggested changes in Parts VIII and IX, The Extremities. Dr. Wesley Parke, Professor and Chairman of the Department of Anatomy at the University of South Dakota School of Medicine, for his contribution on the blood supply of the vertebral column and the spinal cord; also for his contribution in the fifth edition on the blood supply of the common bile duct.

A very special acknowledgment is in order for the contribution of Dr. Richard W. Babin, Associate Professor of Otolaryngology and Maxillofacial Surgery at the University of Iowa School of Medicine. After the death of Dr. Anson, his secretary forwarded to me a large box of text and figures that he planned to use for changes in the section on the statoacoustic organ in Chapter 2. Only an otolaryngologist who was associated with Dr. Anson at the University of Iowa could have carried out Dr. Anson's wishes. Dr. Babin faithfully made the extensive changes in this section that Dr. Anson planned.

As in the past, authors of journal articles have been most generous in permitting the use of their material in updating this text. Their contributions and the journal sources have been acknowledged in footnotes or figure legends.

In the years since the publication of the fifth edition in 1971, a phenomenal resurgence of interest in cross-sectional anatomy followed the development of computerized axial tomography and ultrasound techniques. It was tempting to incorporate cross-sectional anatomy in the sixth edition, but this would have made the book much too large and in reality would reproduce material already published in excellent texts and atlases.

Radical changes in the medical curriculum that have occurred in the past quarter of a century have profoundly affected courses in the basic sciences and especially the time devoted to the study of gross anatomy. The changes are due in part to the ever-increasing knowledge in every discipline and a limited amount of time to present the material. Further time restrictions have been imposed by the introduction of courses in the humanities and social sciences, courses that used to be considered part of the premedical curriculum. The medical school graduate today may have only a vague memory of an abbreviated first-year course in gross anatomy. In some medical disciplines this may be of small consequence; however, for surgical residents and for medical students who aspire to be surgeons, a thorough knowledge of gross anatomy is absolutely essential. This means a return to cadaver dissection and a continuing study of anatomical variations in preparation for structural differences encountered at the operating table. This preparation is the fundamental mission of this textbook. It is the reason for a pervasive emphasis on normal variations of human morphology throughout the book. The emphasis on variability also should be helpful to the gross anatomist and the practicing surgeon. In the same context, material on embryology has been included because it helps to explain bizarre findings in the surgical patient. The author and the late Dr. Anson were reared in this tradition by close association with Dr. Leslie B. Arey, then Chairman of the Department of Anatomy at Northwestern University. His textbook, *Developmental Anatomy*, remains the classic in the field of embryology.

The author, at every turning of a page, in every phase of preparation of the book from that of manuscript onward, has been vitally dependent upon the meticulous secretarial work of Mrs. Geraldine Moses. The preparation of the sixth edition would not have been possible without the strong support of the University of South Dakota School of Medicine, from the services of our surgery department secretary to the unlimited availability of our medical illustrator. Many new illustrations have been added, from cadaver dissections to drawings of anatomic structure as observed in the operating room.

Mature introspection makes it abundantly clear that the author has been blessed in his career as an anatomist and as a surgeon by his mentors, from Dr. Anson in medical school to Dr. Frederick A. Collier at the University of Michigan during surgical residency; and through the years by close friendship with surgical colleagues throughout the country. It would be naive if the author did not acknowledge a certain amount of serendipity in his education involving persons, time, and place.

It has been a very special privilege to have worked with some of the greatest medical illustrators in this country. During the period at Northwestern University the medical illustrators were Lucille Cassell Innes, the late Mary Dixon Elder, and the late Tom Jones at the University of Illinois. Lucille Cassell Innes worked with me for a period of thirty-five years although we were separated by half a continent. While on short leaves from the audiovisual department of Loma Linda University she would come to Yankton, South Dakota, when planned cadaver dissections were completed. Finally, in the preparation of the sixth edition of *Surgical Anatomy*, the author has utilized the talents of Mary Jean McFadden, a gifted young medical illustrator who joined our audiovisual department six years ago.

And, again, it is a singular pleasure to acknowledge the cooperation of the W. B. Saunders Company in the preparation of this book; and a very special thank-you to Mrs. Roberta Kangilaski, Medical Editor, and Miss Erika Shapiro, Copy Editor, for their guidance and counsel in the complicated process of preparing a book for publication.

CHESTER B. MCVAY

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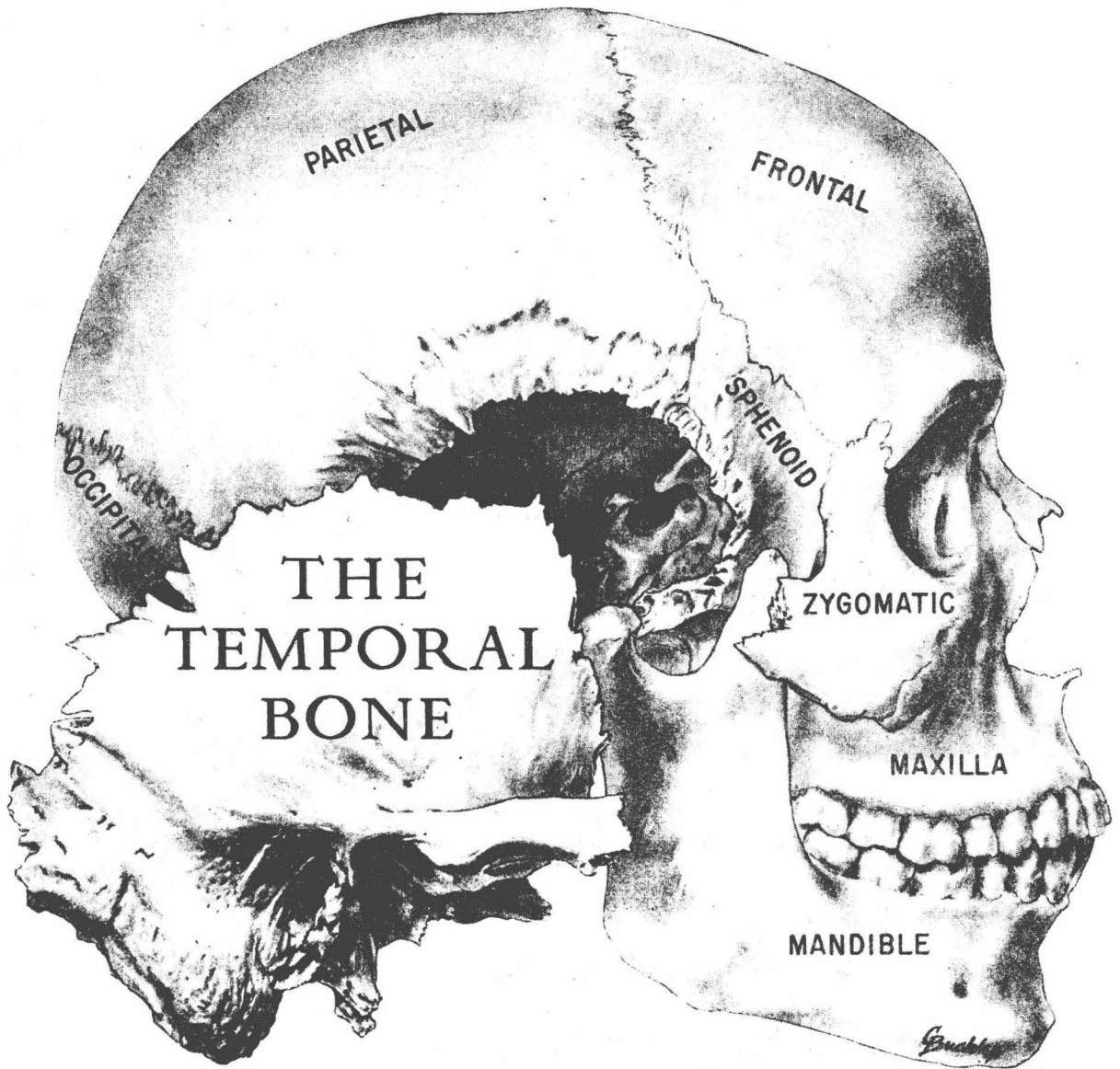
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