

Surgical Pathology

VOLUME ONE SECOND EDITION

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Foreword to the First Edition

One of the important milestones in the history of surgery was the development of the concept that specific diseases could be related to localized pathological changes in certain organs and tissues. Beginning with Morgagni in the mid-eighteenth century attention was directed to diseased organs. Bichat in the early nineteenth century was concerned with diseased tissues and Virchow later led the development of cellular pathology.

These concepts paved the way for the development of specific deliberate mechanical manipulations (surgical procedures) that might favorably influence the course of a disease process.

A textbook of surgical pathology appropriately focuses upon those diseases which by their localization can be influenced by surgical manipulation, frequently by complete or partial excision of the diseased part. Surgical procedures designed to correct structural defects that have caused abnormal function, such as the closure of a patent ductus arteriosus or the correction of a congenital esophageal atresia, have played an increasing role in the surgeon's armamentarium in recent decades.

Refinements of diagnostic examinations by chemical, immunological, and biophysical procedures as well as the routine use of various screening tests have introduced new variations and varieties of the basic disease processes, at times with quite subtle differences, into the domain of the surgeon and the surgical pathologist.

In recognition of the complexity of modern surgical pathology, Dr. Coulson has sought to

coordinate the knowledge of a number of his colleagues who have special interests in the major divisions of the field. Each author has developed a thorough presentation of the gross and microscopic organ and tissue changes and related physiological disturbances, followed by a discussion of the effects of these pathological conditions as they relate to specific clinical problems.

Despite the increased accuracy of preoperative tests and procedures, the definitive diagnosis directing the surgeon's course of action and predicting the ultimate prognosis for the patient in many cases must await the final pathological examination and interpretation. In this volume the information upon which the pathologist and his surgical colleague must make their decisions has been comprehensively analyzed and presented.

As Edward Churchill, former professor of surgery at Harvard, once said, "Surgery is not a single applied science; it is the application of many sciences to the management of disease and injury." Of these sciences, none outranks pathology in importance.

This book will not only serve as an authoritative up-to-date text and reference for the surgical pathologist and his students, but will also provide information that is so essential to the surgeon in recognizing and understanding the diseases afflicting his patients.

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Preface

In the 10 years since the publication of the First Edition of *Surgical Pathology*, significant advances have taken place in the practice of surgical pathology. The chapters on lymphohematopoietic, cardiovascular, and urinary tract diseases have been completely rewritten by new authors. The soft tissue chapter by Joseph Mirra, M.D., has been considerably lengthened and includes material unavailable in other textbooks. The chapters on the female reproductive system, lung, breast, and alimentary tract have also been significantly augmented. The computerization of diagnoses, with the possibility of sophisticated retrieval, has become commonplace, and the original first chapter, dedicated to this subject, has been omitted.

We rarely encounter major new diseases today, but the explosion of AIDS with multiple system involvement has been recognized in appropriate sections. The two most important strides in diagnostic technique have been im-

munohistopathology and fine needle aspiration biopsy. The initial enthusiasm that greeted immunologic identification has abated somewhat with the recognition of overlapping specificities. Nevertheless the use of such techniques has become as routine in some areas as the most common "special" stains. The commercial availability of monoclonal antibodies is always increasing, and in a book of this type the recommended usage stands to be outdated as soon as it is quoted. Aspiration biopsy produces specimens that could be claimed by both histopathologist and cytopathologist, but it has become so well established as a separate field that it has its own voluminous coverage and is barely alluded to herein. Techniques such as flow cytometry and DNA probes are occasionally mentioned and might well become major advances during the next decade.

WALTER F. COULSON, M.D.

Preface to the First Edition

The surgical pathologist would indeed be fortunate if all diagnostic problems could be answered in a single textbook. Instead, not only is there a need for a comprehensive library but also subscription to a score of journals. It is probable that the ability to diagnose 95 per cent of all the material received in a surgical pathology department can be acquired in a year or less. The other 5 per cent is learned over the rest of one's professional life. It is my belief that this 95 per cent can be contained in a standard text, from which, with the aid of comprehensive references, the unusual can be pursued. This is intended to be such a text.

Although the gross appearances of lesions can be of considerable importance in diagnosis, for example in skin diseases, gross illustrations are not stressed in this text. The emphasis is on the microscopic appearance on which a diagnosis is usually made. So often do we hear junior pathologists express satisfaction at the likeness of their slide to the illustration in the book! In certain organs, however, such as the skeleton, we feel that examination other than microscopic—in this case radiography—is mandatory; and therefore in the chapter on Bone

radiographs figure prominently. Our experience with electron microscopy in diagnostic work is mentioned only with respect to those lesions in which we think it has value. Etiology, pathogenesis, and clinical correlation have generally been left to the standard textbooks of pathology. Nomenclature is stressed. This is the language of communication between surgical pathologist and primary clinician. It is also basic to systems of indexing diagnoses. The plethora of disease entities and their synonyms has necessitated the use of computers in many large departments. At UCLA we are proud of our Natural Language system of indexing and retrieval, and the first chapter in this book deals with its development and application.

The role of surgical pathology in patient care has never been more important. It would seem that given reasonable uniformity in the excellence of surgical care, the limiting factor becomes the expertise of the surgical pathologist whose decision determines the performance of minor or radical procedures.

WALTER F. COULSON, M.D.

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Once again I thank all of the authors and their secretaries for their contributions to the Second Edition.

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