
Atlas of Anatomic Pathology

Series Editor

Liang Cheng
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This Atlas series is intended as a “first knowledge base” in the quest for diagnosis of usual and unusual diseases. Each atlas will offer the reader a quick reference guide for diagnosis and classification of a wide spectrum of benign, congenital, inflammatory, nonneoplastic, and neoplastic lesions in various organ systems. Normal and variations of “normal” histology will also be illustrated. Each atlas will focus on visual diagnostic criteria and differential diagnosis. It will be organized to provide quick access to images of lesions in specific organs or sites. Each atlas will adapt the well-known and widely accepted terminology, nomenclature, classification schemes, and staging algorithms. Each volume in this series will be authored by nationally and internationally recognized pathologists. Each volume will follow the same organizational structure. The first Section will include normal histology and normal variations. The second Section will cover congenital defects and malformations. The third Section will cover benign and inflammatory lesions. The fourth Section will cover benign tumors and benign mimickers of cancer. The last Section will cover malignant neoplasms. Special emphasis will be placed on normal histology, gross anatomy, and gross lesion appearances since these are generally lacking or inadequately illustrated in current textbooks. The detailed figure legends will concisely summarize the critical information and visual diagnostic criteria that the pathologist must recognize, understand, and accurately interpret to arrive at a correct diagnosis. This book series is intended chiefly for use by pathologists in training and practicing surgical pathologists in their daily practice. The atlas series will also be a useful resource for medical students, cytotechnologists, pathologist assistants, and other medical professionals with special interest in anatomic pathology. Trainees, students, and readers at all levels of expertise will learn, understand, and gain insights into the complexities of disease processes through this comprehensive resource. Macroscopic and histological images are aesthetically pleasing in many ways. This new series will serve as a virtual pathology museum for the edification of our readers.

More information about this series at <http://www.springer.com/series/10144>

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Atlas of Differential Diagnosis in Breast Pathology

 Springer

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To my family – Michael, Rebecca, Deborah, Daniel, and Jessica, with much love.

Puay Hoon Tan

To my husband, Toraman, and son, Onur, for their endless love and support, which have shown me what is important in life.

Aysegul Sahin

Series Preface

One Picture Is Worth Ten Thousand Words— Frederick Barnard, 1927

Remarkable progress has been made in anatomic and surgical pathology during the last 10 years. The ability of surgical pathologists to reach a definite diagnosis is now enhanced by immunohistochemical and molecular techniques. Many new clinically important histopathologic entities and variants have been described using these techniques. Established diagnostic entities are more fully defined for virtually every organ system. The emergence of personalized medicine has also created a paradigm shift in surgical pathology. Both promptness and precision are required of modern pathologists. Newer diagnostic tests in anatomic pathology, however, cannot benefit the patient unless the pathologist recognizes the lesion and requests the necessary special studies. An up-to-date Atlas encompassing the full spectrum of benign and malignant lesions, their variants, and evidence-based diagnostic criteria for each organ system is needed. This Atlas is not intended as a comprehensive source of detailed clinical information concerning the entities shown. Clinical and therapeutic guidelines are served admirably by a large number of excellent textbooks. This Atlas, however, is intended as a “first knowledge base” in the quest for definitive and efficient diagnosis of both usual and unusual diseases.

The *Atlas of Anatomic Pathology* is presented to the reader as a quick reference guide for diagnosis and classification of benign, congenital, inflammatory, nonneoplastic, and neoplastic lesions organized by organ systems. Normal and variations of “normal” histology are illustrated for each organ. The Atlas focuses on visual diagnostic criteria and differential diagnosis. The organization is intended to provide quick access to images and confirmatory tests for each specific organ or site. The Atlas adopts the well-known and widely accepted terminology, nomenclature, classification schemes, and staging algorithms.

This book Series is intended chiefly for use by pathologists in training and practicing surgical pathologists in their daily practice. It is also a useful resource for medical students, cytotechnologists, pathologist assistants, and other medical professionals with special interest in anatomic pathology. We hope that our trainees, students, and readers at all levels of expertise will learn, understand, and gain insight into the pathophysiology of disease processes through this comprehensive resource. Macroscopic and histological images are aesthetically pleasing in many ways. We hope that the new Series will serve as a virtual pathology museum for the edification of our readers.

Indianapolis, IN, USA

Liang Cheng, MD

Preface

Breast pathology is key to the diagnosis and management of breast diseases. Interpretation of breast histologic findings constitutes a significant proportion of the daily workload of the surgical pathologist. This task can be challenging and demanding because diagnostic categorization is used to select treatment from a potentially diverse range of options, and the diagnosis of borderline and malignant lesions raises patient anxieties.

In this atlas, we use our collective experience in diagnostic breast pathology to present a pictorial narrative of a wide range of breast conditions that are grouped together along broad themes and histologic patterns, focusing on differential diagnoses and their illustrations. Important morphologic similarities and differences are compared and contrasted through a series of representative photomicrographs, with adjunctive immunohistochemistry used to offer additional support for specific diagnoses. Where relevant, molecular alterations that are characteristic of certain breast lesions are described.

There are many excellent breast pathology textbooks available today that offer encyclopaedic information on a comprehensive list of breast conditions. Our aim in writing this atlas is not to replace or compete with these available textbooks, but to provide a quick visual reference for the practicing surgical pathologist during evaluation of breast lesions. Concise text and explanatory legends accompany the illustrations, many of which are photomicrographs of conditions that could potentially be mistaken for the entity being described; these are arranged together to highlight their differences. Microscopic nuances that help weigh towards certain diagnoses are articulated. Because this is intended to be a working atlas, the list of entities is not exhaustive, including only those that form part of the differential diagnostic spectrum. Some lesions appear in different chapters, illustrating their morphologic heterogeneity.

We hope that this atlas will be a useful microscope tableside companion for the busy surgical pathologist, who could pick it up and have a quick and convenient pictorial guide to differential diagnoses of challenging breast lesions. Pathologists are by nature visual beings, and we trust that the illustrations in this atlas will be enjoyed, much as we delighted in putting them together.

Singapore, Singapore
Houston, TX, USA

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Aysegul A. Sahin

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