

ESSENTIALS IN CYTOPATHOLOGY SERIES

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# Pulmonary Cytopathology

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# Preface

Recent developments in molecular markers are changing the landscape of our understanding of lung disease, particularly lung cancer, and opening the field for targeted therapies. The role of cytopathology in planning and delivery of personalized medicine is poised for a significant and exciting leap. Pulmonary cytopathology comprises a significant proportion of the non-gynecologic cytopathology practice in hospital-based laboratories. Development of advanced radiological techniques has improved the detection of and access to smaller lesions of the lung, at the same time creating new challenges for the radiologist and pathologist to obtain representative specimens from the lesion and establish a diagnosis on limited cytologic and histologic specimens. Rapidly expanding applications of immunohistochemistry and immunocytochemistry on cytologic (smears, cytospins, and liquid preparations) and histologic (e.g., cell blocks and core biopsies) preparations help to determine the origin and nature of lesions, but have added new challenges for pathologists who must make prudent choices about these techniques and then interpret the results in correlation with morphologic findings.

In this book, the characteristic cytologic features as well as the spectrum of changes in selected benign lesions and malignant neoplasms will be presented, along with the appropriate use of ancillary techniques to aid in the diagnosis. Emphasis will be placed on differential diagnosis between benign and malignant diseases and among the various types of neoplasms. Recent developments in classification of lung disease, particularly neoplasms, and their impact on therapeutic modalities will be discussed.

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