
The field of early cervical neoplasia and preneoplasia is progressing rapidly in terms of diagnosis, treatment, and research. Crum, Cibas, and Lee have done an excellent job in detailing both the surgical and cytologic diagnostic features of early cervical disease. *Pathology of Early Cervical Neoplasia* is divided into 10 chapters, and chapters 3 through 9 are devoted to the actual discussion and pictorial representation of cervical disease. An excellent feature of this book is the side-by-side depiction of both the cytology and surgical pathology. A text merging these two branches of anatomic pathology has been needed for a long time. All cervical lesions are represented amply and the majority of figures are in black and white, although there are a few color plates. The predominance of black and white figures is not at all a drawback for the surgical pathology; these figures are excellent in quality and at a high enough power so that the readers can actually make a judgment for themselves in regard to grading the degree of dysplasia. The cytology figures also are crisp and show significant detail, although some of the points would have been better illustrated with more color.

Chapter 3 discusses the classification systems for preneoplastic lesions, and the reader quickly is introduced to the two-grade system (high- and low-grade dysplasia) that is used extensively throughout the text. The authors not only apply this system to cytology (which is what the Bethesda system essentially does) but also to surgical pathology. My opinion is that this is extremely helpful and makes a lot of sense; applying a two-grade system is simpler than the classic three-grade system (mild, moderate, and severe dysplasia). However, for those die-hards who like to use three grades of dysplasia, there may be some disagreement.

Chapters 4 to 7 discuss diagnostic criteria of squamous cell abnormalities. I think this is a difficult task, because of the large amount of interobserver discrepancy inherent in cervical lesion diagnosis. Anyone who looks at cervical biopsy specimens knows how difficult it is to be consistent even with oneself and probably views oneself as either "more benign" or "more malignant" compared with the next pathologist. The beauty of this text is that the reader does not necessarily have to agree with the authors on every case! Regardless of how one views the authors on the benign-malignant scale, the authors remain consistent with their criteria and the grading of lesions is well described. Thus, for any novice in the field of cervical dysplasia diagnosis, this text is excellent. The first part of each of the chapters is devoted to the discussion of diagnostic criteria. The second part presents specific cases that illustrate either straightforward or difficult diagnoses. In total, 69 cases are presented in this format. I found the chapter entitled "Nondiagnostic Squamous Atypias" one of the best and up-to-date chapters on the cytologic diagnosis of atypical squamous cells of undetermined significance anywhere, including some cytology texts! In this chapter, Papanicolaou smears revealing atypical squamous cells of undetermined significance are subclassified and the pitfalls in specific subclassifications are discussed.

I think that the chapter on glandular lesions was also extremely thorough, particularly in regard to the description of glandular neoplasia diagnosis on surgical and cytology specimens. The area of cervical glandular neoplasia is controversial and this chapter is well referenced. The discussion of the Papanicolaou smear diagnosis of atypical glandular cells of undetermined significance (AGUS) was, however, somewhat limited. At some institutions, a diagnosis of AGUS is made in approximately 0.5% of all smears (which is not a small number, since millions of women have an annual smear!), and the discussion of AGUS was only several paragraphs.

The remainder of the book focuses on the historical perspective of cervical neoplasia and preneoplasia (chapter 1), viral pathogenesis (chapter 2), and laboratory management and clinical impact of diagnosis (chapter 10). These are extremely broad areas, although the chapters are very succinct and readable. In the chapter on laboratory management, some of the newer technologies (eg, human papillomavirus testing) are discussed.

For those who want an up-to-date, concise, and interesting discussion of the pathologic and cytologic aspects of early cervical neoplasia, this is your text.

Stephen S. Raab, MD

Department of Cytopathology

University of Iowa Hospitals and Clinics

Iowa City, Iowa


The editors state in the preface that "this book is intended for use by medical technologists, residents, fellows, and clinicians" and that their goal is "to present this revolutionary technology [molecular diagnostics] to these trainees in a concise yet understandable fashion and include examples of its applications to the various divisions of laboratory medicine." I believe the editors and authors have more than adequately accomplished their purpose.

The book is divided into four parts: basic molecular biology, molecular technologies, applications to molecular pathology, and issues for the clinical molecular pathology laboratory. Each part is subdivided into chapters. Part I begins with an
interesting historical perspective on the evolution of the
clinical diagnostic laboratory (chapter 1), followed by two
well-written chapters that overview nucleic acid chemistry,
structure, and function (chapter 2) and nucleic acid proce­
dures (chapter 3).

For me, the best part of the book is part II in which chap­
ters 4 through 9 address the following topics: nucleic acid
blotting techniques, DNA amplification techniques, reverse
transcriptase-polymerase chain reaction (RT-PCR), PCR­
based methods for mutation detection, nucleic acid
hybridization and amplification in situ, and gene therapy.
These chapters are introductory, but they also contain much
more information than is found in a usual introductory
chapter. Thus, these chapters convey the general concepts
and provide adequate details and helpful bits of informa­
tion for the laboratorian. For example, chapter 4 includes
sections entitled “troubleshooting” of Southern and
Northern blot analyses. Chapters 5 and 6 clearly explain the
PCR and RT-PCR techniques and provide helpful com­
ments for laboratorians attempting to use these methods in
the laboratory. Chapter 7, which focuses on methods to
detect gene mutations, is the highlight of part II in my opin­
ion. Drs Rohlfs and Highsmith clearly and concisely pre­
sent all of the commonly used methods. Chapter 8 is a nice
review of in situ hybridization and includes a particularly
good introduction to fluorescence in situ hybridization, also
known as FISH.

Part III contains seven chapters that focus on relevant
molecular information as it pertains to molecular testing for
various diseases. Overviews of molecular information and
the role of molecular testing are presented in the fields of
neurologic and neuromuscular diseases, endocrine disor-
ders, cardiovascular diseases, hematologic neoplasms,
other human neoplasms, and infectious diseases. Because I
am not well versed in the role of molecular testing in the
diseases presented in most of these chapters, I read these
chapters as a beginner and found them well-written, clear,
and informative. Because I am interested in molecular test­
ing of hematologic neoplasms (chapter 15), I am more able
to critically evaluate this chapter by Drs Rezuke and
Abernathy. It is a clear overview of antigen receptor gene
rearrangements and chromosomal translocations and their
usefulness for molecular testing. Part IV of this book is brief
and includes short chapters on quality control and future
directions for the field.

Throughout the book I found the figures to be well cho­
sen and informative. Most of the figures are diagrams; few
are figures of gels, blots, histologic features, or FISH. In a
future edition, if cost permits, the FISH figures would be
better in color, but the black and white figures are ade­
quate. The tables are helpful, and the reference lists at the
end of each chapter are adequate, but not exhaustive, and
relatively up to date. Because this is a multiauthored book,
some unevenness and duplication exist between chapters,
which cannot be avoided. In some chapters, the list of refer­
ces is far longer or more up to date than in others.
However, the editors have kept these chapter-to-chapter
variations to a minimum.

I highly recommend this book for those interested in clin­
ical molecular diagnosis. Medical technologists, residents,
fellows, and other trainees beginning in the field will find
the book helpful. I also believe this book will satisfy those
who are more expert in certain areas of molecular diagnosis,
but who have been unable to keep up with the wide range
of recent advances in molecular diagnosis.

L. JEFFREY MEDIEROS, MD
Department of Anatomic Pathology
City of Hope National Medical Center
Duarte, California