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CAMBRIDGE ILLUSTRATED SURGICAL PATHOLOGY

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INTRAOPERATIVE CONSULTATION IN SURGICAL PATHOLOGY

CAMBRIDGE ILLUSTRATED SURGICAL PATHOLOGY

Mahendra Ranchod, MB, ChB, MMed (Path)
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CONTRIBUTORS

Reid B Adams, MD
Professor and Chief, Division of Surgical Oncology
Chief, Hepatobiliary and Pancreatic Surgery
University of Virginia Health System
Charlottesville, VA, USA

Syed Ali, MD
Associate Professor of Pathology
The Johns Hopkins University School of Medicine
The Sol Goldman Pancreatic Cancer Research Center
Baltimore, MD, USA

John L. D. Atkinson, MD
Professor of Neurosurgery,
Mayo Clinic,
Rochester, MN, USA

Raffi S. Avedian, MD
Assistant Professor
Department of Orthopaedic Surgery
Stanford University School of Medicine
Stanford, CA, USA

Carl A. Bertelsen, MD, FACS
Department of Surgery,
Good Samaritan Hospital
San Jose, CA, USA

Robert H. Byrd MD
Instructor in Pathology and Immunology
Baylor College of Medicine,
Texas Children’s Hospital
Houston, TX, USA

Darrell L. Cass MD
Assistant Professor of Surgery and Pediatrics
Texas Children’s Hospital
Houston, TX, USA

John K. C. Chan MBBS, FRCPath, FRCPA
Consultant Pathologist,
Department of Pathology,
Queen Elizabeth Hospital,
Hong Kong, SAR China

Jon M. Davison, MD, PhD
Assistant Professor of Pathology
University of Pittsburgh School of Medicine
Pittsburgh, PA, USA

Megan K. Dishop MD
Associate Professor of Pathology
The Children’s Hospital, University of Colorado-Denver,
Denver, CO, USA

Sarah M. Dry
Associate Professor, Department of Pathology,
David Geffen School of Medicine at UCLA
Los Angeles, CA, USA

Umamaheswar Duvvuri MD, PhD
Assistant Professor,
University of Pittsburgh School of Medicine
Staff Surgeon, VA Pittsburgh Health System
Pittsburgh, PA, USA

David W. Eisele, MD, FACS
Professor and Chairman
Department of Otolaryngology-Head and Neck Surgery
University of California, San Francisco
San Francisco, CA, USA

Elliot K. Fishman, MD
Professor of Radiology and Radiological Sciences
The Sol Goldman Pancreatic Cancer Research Center
The Johns Hopkins University School of Medicine
Baltimore, MD, USA
**LIST OF CONTRIBUTORS**

<table>
<thead>
<tr>
<th>Name</th>
<th>Position and Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steven D. Hart, MD</td>
<td>Assistant Clinical Professor, Department of Pathology, David Geffen School of Medicine at UCLA, Santa Monica-UCLA, Santa Monica, CA, USA</td>
</tr>
<tr>
<td>Michael R. Hendrickson, MD</td>
<td>Professor of Pathology and Co-Director of Surgical Pathology, Stanford University School of Medicine, Stanford, CA, USA</td>
</tr>
<tr>
<td>Karen M. Horton, MD</td>
<td>Professor of Radiology and Radiological Sciences, The Sol Goldman Pancreatic Cancer Research Center, The Johns Hopkins University School of Medicine, Baltimore, MD, USA</td>
</tr>
<tr>
<td>Andrew E. Horvai, MD, PhD</td>
<td>Associate Clinical Professor of Pathology, University of California, San Francisco, San Francisco, CA</td>
</tr>
<tr>
<td>Ralph H. Hruban, MD</td>
<td>Professor of Pathology, The Sol Goldman Pancreatic Cancer Research Center, The Johns Hopkins University School of Medicine, Baltimore, MD, USA</td>
</tr>
<tr>
<td>Julia C. Iezzoni, MD</td>
<td>Associate Professor, Department of Pathology, University of Virginia Health System, Charlottesville, VA, USA</td>
</tr>
<tr>
<td>Electron Kebebew, MD</td>
<td>Senior Investigator and Head of Endocrine Surgery Section, National Cancer Institute, Surgery Branch CRC, Bethesda, MD, USA</td>
</tr>
<tr>
<td>Richard L. Kempson, MD</td>
<td>Professor Emeritus, Active Department of Pathology, Stanford University School of Medicine, Stanford, CA, USA</td>
</tr>
<tr>
<td>Seth P. Lerner, MD</td>
<td>Professor of Urology, Beth and Dave Swalm Chair in Urologic Oncology, Scott Department of Urology, Baylor College of Medicine, Houston, TX, USA</td>
</tr>
<tr>
<td>Linda W. Martin, MD, MPH</td>
<td>Department of Thoracic Surgery, The Cancer Institute, St. Joseph Medical Center, Towson, MD, USA</td>
</tr>
<tr>
<td>Charles Michael Lombard, MD</td>
<td>Dept. of Pathology, El Camino Hospital, Mountain View, CA and Adjunct Associate Clinical Professor of Pathology, Stanford University Medical Center, Stanford, CA, USA</td>
</tr>
<tr>
<td>Teri A. Longacre, MD</td>
<td>Professor and Co-Associate Director of Surgical Pathology, Department of Pathology, Stanford University School of Medicine, Stanford, CA, USA</td>
</tr>
<tr>
<td>Jesse K. McKenney, MD</td>
<td>Assistant Professor, Department of Pathology, Stanford University Medical Center, Stanford, CA, USA</td>
</tr>
<tr>
<td>Cesar A. Moran, MD</td>
<td>Deputy Chair, Professor of Pathology &amp; Director of Thoracic Pathology, The University of Texas M.D. Anderson Cancer Center, Houston, TX, USA</td>
</tr>
<tr>
<td>Michael B. Morgan, MD</td>
<td>Professor of Pathology University of South Florida College of Medicine, Clinical Professor of Dermatology University of Florida College of Medicine, Clinical Professor of Dermatology Michigan State College of Medicine, Chief, Dermatopathology James Haley Veterans Administration Hospital, Tampa, FL, USA</td>
</tr>
</tbody>
</table>
LIST OF CONTRIBUTORS

Isaac M. Neuhaus, MD
Assistant Professor
Department of Dermatology
University of California, San Francisco
San Francisco, CA, USA

Richard J. O’Donnell, MD
Chief, UCSF Orthopaedic Oncology Service
UCSF Helen Diller Family Comprehensive Cancer Center
San Francisco, CA, USA

Mahendra Ranchod, MB, ChB, MMed.
Department of Pathology,
Good Samaritan Hospital, San Jose, CA
Director, Calpath/Gyne-Path Laboratory, Los Gatos, CA
Adjunct Clinical Professor of Pathology,
Stanford University School of Medicine,
Stanford CA, USA

David C. Rice, MB, BCh, FRCSI
Associate Professor,
Department of Thoracic and Cardiovascular Surgery,
The University of Texas M.D. Anderson Cancer Center,
Houston, TX, USA

Jae Y. Ro, MD, PhD
Professor of Pathology and Laboratory Medicine,
The Methodist Hospital and
Weill Medical College of Cornell University
Houston, Texas, USA

Fausto Rodriguez, MD
Assistant Professor
Dept. of Laboratory Medicine and Pathology
Mayo Clinic Rochester, MN, USA

Bernd W. Scheithauer, MD
Professor of Pathology,
Department of Laboratory Medicine and Pathology
Mayo Clinic
Rochester, MN, USA

Timothy M. Schmitt, MD
Assistant Professor
Transplant and Hepatobiliary Surgery
Department of Surgery
University of Virginia Health System
Charlottesville, VA 22908

Richard Schulick, MD
Professor of Surgery
The Sol Goldman Pancreatic Cancer Research Center
The Johns Hopkins University School of Medicine
Baltimore, MD, USA

Raja R. Seethala, MD
Assistant Professor,
Department of Pathology,
University of Pittsburgh School of Medicine,
Presbyterian University Hospital,
Pittsburgh, PA, USA

Steven S. Shen, MD, PhD
Associate Professor of Pathology and Laboratory Medicine
The Methodist Hospital and
Weill Medical College of Cornell University
Houston, TX, USA

Saul Suster, MD
Professor and Chairman
Department of Pathology
Medical College of Wisconsin
Milwaukee, WI, USA

Patrick A. Treseler, MD, PhD
Professor of Pathology
Associate Director of Surgical Pathology
University of California San Francisco
San Francisco, CA, USA

Luan D. Truong, MD
Professor of Pathology and Laboratory Medicine
The Methodist Hospital and
Weill Medical College of Cornell University;
Adjunct Professor of Pathology and Medicine, Baylor College of Medicine
Houston, TX, USA

Roderick R. Turner, MD
Adjunct Member, John Wayne Cancer Institute at Saint John’s Health Center
Santa Monica, CA, USA
This book is about the pathologist’s role as consultant during surgical procedures, a role that requires the pathologist to make a diagnosis that will help the surgeon perform the appropriate surgical procedure. We discuss how intraoperative consultation can be challenging because of time constraints, limited sampling and a restricted repertoire of tests, but proffer that these limitations can be overcome if the pathologist is fully informed of the clinical aspects of the case, is able to extract the maximum amount of information from examination of the specimen, and is aware of what the surgeon needs to perform the correct surgical procedure.

An on-going problem with intraoperative consultation is that specimens are often submitted to the laboratory with minimal clinical history, leaving the pathologist to decide when to seek more information. While many lesions can be correctly interpreted with limited data, there are situations when clinical information is essential to reach the correct diagnosis. Unfortunately, pathologic examination alone will not always reveal the underlying complexity of a case, which is why we recommend a pro-active approach, seeking information before the specimen is sent to the laboratory. The amount of effort expended in gathering this information should be commensurate with the demands of the case, and often the most efficient way to gain this perspective is to talk to the surgeon directly. Our position is that the role of consultant requires the pathologist to take a comprehensive approach to intraoperative diagnosis, gathering relevant clinical information, reviewing imaging studies when appropriate, examining prior biopsy material when necessary, and being familiar with the surgeon’s operative plan – because failure to do so may lead to serious errors.

Examination of the surgically excised specimen is the main component of intraoperative consultation, and we discuss the relative merits and shortcomings of gross examination, frozen section and cytologic techniques. Diagnoses rendered intraoperatively are frequently as accurate as final diagnoses, but there are occasions when a specific diagnosis cannot be made, and instead, the pathologist has to offer a provisional diagnosis that is “good enough” for the surgeon to perform the appropriate surgical procedure. We discuss the pragmatism of a “good enough” diagnosis and how its proper use requires an understanding of clinical management and surgical algorithms.

Communication with the surgeon is an important component of intraoperative consultation, a task that pathologists accomplish with variable success. Reporting the diagnosis on a straight-forward case is a simple matter, but is more challenging when handling a complicated case, or when it is not possible to make a specific diagnosis. We discuss strategies for handling these situations, and the benefits of visiting the operating room for direct communication with the surgeon.

Surgical management requires teamwork, and the pathologist is drawn into the team when a surgeon requests an intraoperative consultation. The pathologist now becomes a principal player because the pathologic diagnosis will very likely influence surgical management. The pathologist’s contribution is greatest when he is fully engaged as a consultant, and when surgeon and pathologist work co-operatively for the benefit of the patient. This book attempts to capture that spirit of collaboration by having surgeons co-author most of the chapters of this book.

This is not another textbook of surgical pathology. Instead, this book focuses on issues that are relevant to the intraoperative arena, and attempts to address the following questions: What are the indications for intraoperative diagnosis? What information should the pathologist have on hand before rendering a diagnosis? How should specimens be handled intraoperatively? What are the pitfalls in diagnosis, considering the limitations of intraoperative testing? What information should the pathologist provide so that the surgeon may perform the correct surgical procedure? What are the managerial consequences of intraoperative diagnosis? When should the pathologist advise against subjecting a biopsy to frozen
section evaluation? How should the pathologist handle an inappropriate request for frozen section diagnosis from a recalcitrant surgeon?

This book is written for surgical pathologists and assumes that the reader has a working knowledge of diagnostic pathology. This text is also meant for pathology residents who are trying to understand the complex role of a consultant during surgical procedures. Residents acquire the skills of intraoperative consultation by an apprenticeship-like process that is variable in quality, a hit-and-miss arrangement that may explain why newly qualified pathologists are often poorly prepared to function in the intraoperative arena. It may be time for residency training programs to adopt a more formal approach to teaching the skills of intraoperative consultation, and perhaps this book will provide a step in that direction.

It is challenging to produce a multi-authored book with a unified voice, and I am grateful to the contributors of this volume for the effort they have made to reach this goal. The contributors should be given credit if this book achieves its goals, but I assume full responsibility for any of this volume's shortcomings.

The ideas and practices espoused in this book are derived from many sources. Some of these contributions are acknowledged in the reference section of each chapter, but many of the subtleties of intraoperative consultation have been passed on from pathologist to pathologist, and from one generation of pathologists to the next, so that their origins are clouded by the passage of time. We honor these contributions by expressing gratitude to our teachers, mentors and colleagues, recognizing that they are part of a lineage of physicians who have helped to shape the field of modern surgical pathology.

MAHENDRA RANCHOD