NERVOUS SYSTEM

Cambridge Illustrated Surgical Pathology

_Nervous System_ is the new atlas-oriented resource in nervous system pathology. As the fourth book in the Cambridge Illustrated Surgical Pathology series, it is a comprehensive text of methods utilized by pathologists to accurately diagnose diseases affecting the brain, meninges, spinal cord, peripheral nerves, skull and paraspinal soft tissues, and cerebrospinal fluid. The book is a richly illustrated guide to surgical neuropathology, including all primary brain tumors as well as others arising near the nervous system that are also within the scope of neurosurgical practice. Numerous neuroimaging examples are provided to underscore the importance of knowing the basics of radiographic studies in accurately diagnosing CNS pathology. A complete spectrum of nonneoplastic neuropathological entities is also illustrated, including infectious, inflammatory, and epilepsy-related neuropathology. Additional chapters address intraoperative consultation and frozen sections, as well as CSF cytopathology.

Hannes Vogel is a board-certified neuropathologist and the Director of Neuropathology at the Stanford University School of Medicine. He has a particular interest and expertise in the area of pediatric brain tumor pathology and biology and has written extensively on this topic and many others in the area of neuropathology.
CAMBRIDGE ILLUSTRATED SURGICAL PATHOLOGY

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NERVOUS SYSTEM

Cambridge Illustrated Surgical Pathology

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With a Contribution by Shawn Corey, M.D., Ph.D. (Neuroimaging)
Dedicated to the persons whose conditions are depicted in this book and those who care for them.
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PREFACE

The guiding principle in this volume is the importance of knowing what pathological processes are common for a given anatomical location and age of the patient, upon a foundation of knowledge in the histology of normal and reactive processes in the nervous system. Many mistakes in surgical neuropathology may be avoided simply by maintaining an unswerving effort to determine the clinical, laboratory, and, sometimes most importantly, radiological findings in a given case. We also urge the use of standard and uniform terminology rather than idiosyncratic or descriptive diagnoses, which incorporates the World Health Organization 2007 classification for tumors along with contemporary terminology and classification schemes for nonneoplastic diseases. Unambiguous and consistent terminology is the foundation of a useful interaction primarily with neurosurgeons, but also with other allied health providers in neurooncology and radiation oncology. Our experience also dictates that diagnostic precision is required to the same degree when interacting with basic scientists who utilize tissue samples for brain tumor research.

The discipline of neuropathology is known for one of the highest discordance rates between the diagnoses of general surgical pathologists and trained neuropathologists. This book strives to underscore pitfalls in diagnostic surgical neuropathology, often due to mimicry between entirely different neoplasms or between reactive and neoplastic conditions. In the same sense, this book may be useful for general radiologists because of the detailed correlation we have sought to achieve between neuroimaging and many important neuropathological diseases.

Neuropathology, more so than other surgical pathology subspecialties, involves an extensive breadth of diagnostic entities with significant overlaps into hematopathology and the pathology of soft tissue tumors and infectious diseases. In the spirit of the Cambridge Illustrated Surgical Pathology series, this can perhaps best be approached and appreciated by a richly illustrated atlas to reinforce the vast array of pathological images the reader will encounter in the study and practice of surgical neuropathology.

Hannes Vogel, M.D.
ACKNOWLEDGMENTS

I wish to acknowledge the invaluable assistance of Anet James, Digital Imaging Specialist and Photographer in the Department of Pathology at Stanford University, for graphic art and the perfecting of photomicrographs. I also acknowledge the support and forbearance of my colleagues in the Laboratory of Neuropathology.