BOOK REVIEW

Russell and Rubinstein’s Pathology of Tumors of the Nervous System (7th edition)


The 7th edition of Russell and Rubinstein’s Pathology of Tumors of the Nervous System aims to serve as the definitive academic textbook on the multiple aspects of the pathology of human central nervous system tumors. The publisher states that its extensive 66 chapters and two Appendices represent the “ultimate source for key information” in the field of clinical neuro-oncology. This edition represents an additional step in the tradition of earlier editions of Russell and Rubinstein’s classic textbook.

The text is entirely dedicated to the pathology and histology of central nervous system tumors. This edition covers a range of topics that include diagnostic criteria, immunohistochemistry, molecular biology, and genetics. Although this large number of topics is discussed, the editors organize them very clearly by dedicating a single chapter to one subject. The book is organized as follows: First, it gives a historical annotation of the classification of tumors of the nervous system, followed by a discussion of brain tumor epidemiology. Next, a variety of tumor types of the brain, brain stem, and spinal cord are discussed in individual chapters. The final chapters address genetic syndromes affecting the nervous system and metastatic tumors.

This multi-author text provides needed updates on important areas of clinical neuropathology. The list of contributors represents a wide spectrum of experts within the field and each of the chapters summarizes recent knowledge relevant to practicing neuropathologists, clinicians, and basic scientists interested in neuro-oncology.

The chapters review the histology and pathology of a vast catalogue of tumors including a section devoted to their diagnosis. It is clear that most of the authors have been chosen because of the contribution they have recently made to the specific area.

Some of the chapters are especially well-written, easy to understand, and especially enjoyable. From my point of view, the chapters written by Drs. A. Perry on Meningiomas (Chapter 34), M. Rosenblum on Neuronal Neoplasms (Chapters 27–29), and A. Rosenberg on Chordomas and Chondrosarcomas (Chapter 55) are excellent and among the best in the book. The chapter written by Drs. Lopes, Thapar, Horvath, and Kovacs on Neoplasms of the Sellar Region (Chapter 54) is also to be mentioned as a classic. The relatively short chapter by Dr. Perry on Solitary Fibrous Tumor (Chapter 35) is precise and very helpful in attempting to clarify the current diagnostic issues linked to this entity. The chapter by Drs. Vinters and Miyata on the Neuropathological Features of Tuberous Sclerosis (Chapter 62) is also very informative as it encompasses the field from clinical diagnosis to neuropathology. In addition, I was impressed by the clear and astute review of the molecular biology of tuberous sclerosis.

Overall, information is well presented and the layout of the chapters is easy to follow. In addition to the text and images included in the chapters, the other resources available in the book (i.e. the Appendices and the CD-ROM) are equally outstanding. The appendices comprise more research-based topics such as invasion and metastasis and models of glioma and medulloblastoma. The CD-ROM is user-friendly and is full of high-quality downloadable images.

Despite this book’s overall informative nature, it is not perfect. For example, illustrations are absent in some chapters or repeated in separate chapters. In addition, there are a few illustrations that are out of focus, including some low-magnification photographs. There are other issues in need of clarification. For example, I was not convinced that the illustration provided for CNS hemangioblastoma (Figure 60.1) was not of an endolymphatic sac tumor since it did not appear to be a classic picture with obvious illustration of stromal cells. In the same chapter, however, the involvement of the HIF-1/VEGF pathway in the pathogenesis of von Hippel-Lindau-related neoplasms is well summarized.

Despite these few concerns, this new edition of Russell and Rubinstein’s text should be very useful to a variety of medical and basic science specialists. The reviews are very comprehensive and clearly written by experts in the field with up-to-date references. The book is mostly well-illustrated, combining good microscopic and ultrastructural figures, schematic representations, MRI images, and summary tables.

This book has to be compared with its competitors that include The Surgical Pathology of the Nervous System and its Coverings, and the WHO Classification of Tumours of the Nervous System. Both of the latter are more moderately priced. In my opinion, this edition of Russell and Rubinstein is worth its price. Its user-friendliness combined with a strong appeal and usefulness as an important reference makes this book not only necessary for neuropathologists but also for all other specialists in neuro-oncology.

David Zagzag, MD, PhD
New York, NY