Meningiomas: Diagnosis, Treatment, and Outcome

J.H. Lee, ed. Springer; 2008, 639 pages, 631 illustrations, \$239.00.

Meningiomas: *Diagnosis, Treatment, and Outcome* is an expansive textbook, written by a neurosurgeon and primarily for neurosurgeons. Dr. Lee has operated on more than 600 meningiomas but has pulled together a team of authors to join him in this book. Meningioma, as the most common extra-axial neoplasm, warrants such an extensive treatise, with 64 chapters, 631 figures (160 in color), and 639 pages. Despite the focus on primary treatment with surgery, radiotherapy and ancillary chemotherapy are also discussed, albeit in lesser detail. There is much here for the neuroradiologist to digest, if he or she has the time.

This text includes detailed and updated information regarding anatomy (with a reminder that “subdurals” are actually within the “dural border layer”). The embryology and pathology are well described. There are 6 chapters grouped together as “Basic Science,” including molecular biology and theories of tumorigenesis, radiation-induced meningioma, and newer treatments, including cyclo-oxygenase and gene therapy.

The section “Diagnosis” has only 4 chapters. There is only 1 chapter devoted to “Diagnostic Neuroradiology”; 1 chapter, “Meningioma: Imaging Mimics,” illustrates differential diagnosis; and a third chapter reviews preoperative embolization.

There is a fourth chapter, “Neuro-Ophthalmic Evaluation.” There are 5 chapters on methods for radiation therapy, including conventional, gamma knife, linear accelerator, and brachytherapy. One chapter discusses “Medical Therapy” and chemotherapy.

In contrast, the bulk of this book is devoted to techniques, methods, and complications of surgical resection. There are 27 chapters devoted

to the surgery of meningiomas, broken down by specific location (eg, convexity, falx, sphenoid wing, optic nerve sheath, spine, etc).

The chapter “Diagnostic Imaging,” with the formidable task of including everything from CT to functional MR imaging to Octreotide positron-emission tomography, is only 10 pages long, and the references are mostly from the 1990s and a few from this millennium, 2005 and older. However, the very next chapter, “Meningiomas: Imaging Mimics,” is surprisingly more thorough, with 20 pages. Once again, the references are all 2005 and older. Between these 2 chapters, the images are adequate to the task and illustrate the spectrum of typical and atypical meningioma, along with some common mimics, such as granulomatous disease (eg, sarcoid) and metastasis (eg, dural lymphoma). In these 2 imaging chapters, there is only a scant discussion of intra-axial edema in the differential diagnosis and prognosis of meningioma. There is, however, a separate chapter on this topic, but it does not have any figures.

Most surprising, some of the best radiologic images are scattered throughout the other chapters, rather than within those dedicated to diagnosis. Overall the figure legends are adequate and accurate. Hemangiopericytoma, anaplastic and malignant meningioma, and other variants are only briefly covered in the chapter “Pathology of Meningioma,” despite the apparent emphasis (in the title) on outcomes.

This book is larger and more comprehensive than other similar texts on meningioma, but the complexity is largely devoted to the surgical treatment. Overall, the references are appropriate and selected mostly from first-tier journals; however, as mentioned, the references are largely from 2005 and earlier. Although this may reflect the lack of novelty in new research efforts for this neoplasm, it might also indicate a production delay between chapter submission, editing, and subsequent publication.

Overall, this is a book that should be available for reference in a large neuroradiology practice and academic health care center. The chapters “Diagnostic Imaging” and “Meningiomas: Imaging Mimics” are worthwhile reading for any radiologist. With the bulk of the material devoted to surgical treatment, it would not be good material for a radiologist to take to the beach or read on a long flight, unless he or she aspires to develop the skills of a surgeon.

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