BOOK REVIEW

Surgery of Spinal Tumors

J. Klekamp and M. Samii, eds. Springer; 2007, 526 pages, 1862 illustrations, \$389.00.

Neuroradiologists infrequently observe the intraoperative findings of patients whose imaging studies they have interpreted unless they are actively involved with intraoperative spinal sonography (which comprises a vanishing small number of radiologists). Now with this textbook, *Surgery of Spinal Tumors*, rich in color photographs from the operating room (OR), a glance into surgical correlations is possible. This, of course, is not a substitute for being in the OR and watching step-by-step tumor removal, but the book is, nonetheless, instructional.

The authors, both German neurosurgeons, have compiled their experience with more than 1000 spinal tumors and have divided the tumors into the usual 3 categories: intramedullary, extramedullary/intradural, and epidural tumors. A by-product of this categorization is that one gets an idea of the relative frequency of various tumors within each category, in both adults and children. Each of these tumor categories starts with a subsection entitled "History and Diagnosis," and in turn, there are sections on neuroradiology, surgery, exposure, and removal. Various, there is material pertinent to that particular set of tumors, including, for example, closure, long-term/short-term complications, survival, adjunct therapy, and issues related to specific tumor type.

Do not expect any great revelations concerning the imaging (predominately MR imaging). One could take exception with some of the legends, such as the failure to observe/mention a large prevertebral soft-tissue mass with tracheal deviation (probably a thyroid tumor) on a postoperative MR image, where surgery had been done for a meningioma, or the description of a "conus lipoma," when in fact this is a lipomyelomeningocele with a distal hydromyelia and spinal

dysraphism. Other strange imaging pops into the text, such as the legends describing split cord and an arteriovenous malformation (AVM) while illustrating only the CT scan and plain films, neither of which demonstrate the split cord or the AVM. The incomplete nature of a few of the legends is exemplified by a case of neurenteric cyst, in which there is a failure to mention the associated vertebral anomaly and incompletely/inadequately described CSF flow studies. In addition, a reasonable addition to the book would have been the inclusion, in the intramedullary tumor section, of pathologic entities that mimic tumors, both clinical and imaging findings, but, in fact, were other etiologies such as inflammatory or autoimmune processes. This, as we all know, is an area where mistakes can be made both by the radiologist and the surgeon.

In the epidural tumor section, there is a wide-ranging and interesting set of pathologies. A number of good cases are shown in the neuroradiology portion of this section, including (just to name a few) unusual osteosarcomas, an extradural cavernoma mimicking a synovial cyst, a small osteoblastoma, cord herniation, intraosseous cavernoma, and epidural hematomas in various stages of evolution. The object here was to compare a number of these entities with tumors in the extradural space. Although perhaps for the neurosurgical community it would not be so important, this reviewer would like to have seen labeling on the intraoperative photographs and sequential line drawings to show some of the more complex approaches to the extradural (bony and soft tissue) tumors.

In fairness, the book is not intended to be a learning experience in imaging (though one would have hoped for more accuracy in some areas)—it was to show how the surgeon approaches and deals with a variety of tumors. In this, the authors have succeeded. This, therefore, is a book that few neuroradiologists will want to own personally but would be an appropriate addition to the library of a neuroradiology department where there is a fellowship training program. In this reviewer's opinion, a deficiency in most neuroradiology training programs is that block time is not specifically set aside for fellows to go to the OR and observe the neurosurgeon in action. Time constraints and clinical demands have abrogated that option; therefore, in a minor sense, this book could be consulted on occasion (admittedly a suboptimal substitute) to show how one deals with spinal tumors.

DOI 10.3174/ajnr.A1598