

Looking to diversify suppliers for MRI contrast agents?

Two cost-effective generic options available. Now you have a choice.

DISCOVER GENERIC
CONTRAST AGENTS

 FRESENIUS
KABI

AJNR

Imaging of the Temporal Bone, 3rd ed

Joel D. Swartz

AJNR Am J Neuroradiol 2001, 22 (10) 1977

<http://www.ajnr.org/content/22/10/1977>

This information is current as
of January 19, 2025.

Imaging of the Temporal Bone, 3rd ed.

Joel D. Swartz and H. Ric Harnsberger. New York, NY: Thieme Medical Publishers; 2001. 512 pages. \$149.00.

For the radiologist whose special interest is not head and neck imaging, analysis of temporal bone anatomy and pathology often is difficult and confounding. A text that can teach this subject well (and, more important, make it stick!) would be welcomed on the shelf of any radiologist, otologist, or surgeon who deals with abnormalities in this area. Fortunately, Drs Swartz and Harnsberger have expanded on their first two editions of this book (published in 1986 and 1991) and have given us the excellent third edition of *Imaging of the Temporal Bone*.

As one would expect, given the interval between the second and third editions, MR imaging has played an increasing role in the imaging of this area, which includes not only in the posterior fossa and internal auditory canal region but also in the temporal bone itself. This fact is reflected in the space devoted to MR imaging. Although CT remains the mainstay in temporal-bone radiology, this text shows that, in some cases, MR imaging can either supplement the CT, making certain findings more definitive, or it can better elucidate the abnormalities.

Much of this book was written by Drs Swartz and Harnsberger; however, three other authors, namely Drs Remley, Crawford, and Tong, contributed as well. The first introductory chapter devotes most of its space to imaging approaches for various disorders that involve the temporal bone. Algorithms outline the imaging examinations recommended in hearing loss (sensorineural and conductive), otomastoiditis, otoscopically visible vascular masses, tinnitus or vertigo, mastoid and middle ear after surgery, facial-nerve disorders, trauma, and masses in the external auditory canal. The technical requirements for CT and MR imaging of each of these clinical abnormalities is described, and readers are referred to the particular chapter that illustrates and provides more extensive details for each abnormality.

Strengths of this book are the excellent quality of its CT and MR images and its inclusion of line drawings. In dealing with temporal bone anatomy and its pathological derangement, one really cannot have too many drawings; as learning devices, they often are used to gain a full appreciation of the complex anatomy of this area. What this reviewer liked was that the normal anatomy of the entire temporal bone and mastoid region is not grouped

together, that is, all in one chapter. What the authors have wisely done instead is describe, illustrate, and abundantly label all the normal anatomy of a particular area in chapters that deal with an associated pathology. For example, the normal external auditory canal is described in the chapter dealing with congenital dysplasias, inflammatory diseases, and various neoplastic conditions of the external auditory canal. The same is true for the sections about the normal and variant anatomy of the middle and inner ear, in which the features are clearly illustrated just before the various pathologic conditions are shown.

After the introductory chapter, which outlines the suggested algorithms for different clinical problems, the following chapters cover the external auditory canal, middle ear and mastoid, vascular abnormalities of the temporal bone, otic capsule, temporal-bone trauma, facial nerve, and vestibulocochlear nerve complex. These chapters are well written and have a uniform style; they are informative and contain sufficient clinical and radiographic correlations. Nearly every item mentioned in the text is illustrated.

A reviewer always wishes to see items that are not included or has items that he or she would like the authors to incorporate into the next edition (with the hope that there will be one). This reviewer would like to see more surgical input in several sections. For instance, in the pages describing mastoidectomy, a few drawings would help to clarify the various types of procedures. Similarly, in the chapter about the otic capsule and otodystrophies, the very informative section about cochlear-implant surgery might be strengthened by including details and drawings of the exact landmarks and measurements that are of interest to otologic surgeons before implantation. As a suggestion for future editions, the authors also might consider providing readers with an outline of each chapter's contents on the first page of the chapter. This outline would greatly assist readers with long and multisegmented chapters, such as the one about the middle ear and mastoids, which runs 122 pages with eight major headings and numerous subheadings. These are minor points, however, in an otherwise well-crafted book. This text should be read cover-to-cover by all trainees and practicing neuroradiologists. Moreover, it should be readily available in every department's library.