Atlas of Interventional Neurology

A.I. Qureshi and A.L. Georgiadis, eds. demosMEDICAL; 2009, 248 pages, \$169.00.

As fewer and fewer neuroradiologists become directly involved in vascular interventional procedures, familiarity with the many techniques and procedures currently in use is less than in the past. Short of spending time in a high-volume neurointerventional suite (which of course would be ideal), this *Atlas of Interventional Neurology* can serve as an update of the endovascular procedures used for a variety of diseases.

There are 8 chapters constructed along the same lines: “Angioplasty and Stent Placement of Extracranial Vessels,” “Angioplasty and Stent Placement of Intracranial Vessels,” “Treatment of Acute Cerebral Ischemia,” “Treatment of Aneurysms and Pseudoaneurysmal Lesions,” “Treatment of AVMs and Fistulas,” “Treatment of Tumors,” “Treatment of Epistaxis,” and “Complications of Endovascular Procedures.” An appendix lists products such as catheters, microcatheters, wires, coils, balloon catheters, stent catheters, distal embolic protection and clot-retrieval devices, and the key manufacturers and their Web addresses.

extensive descriptions for each step, but there is a heavy reliance on the pictorial display. This is an excellent way of showing the core concepts and key information. A valuable list of abbreviations is included because it would not be immediately obvious, at least to this reviewer, what, for example, a “DEPD”

Basically the book consists of 150 cases, divided into the categories mentioned above. Each case starts with a history (called “Background”), followed by the appropriate pre-interventional images. The authors (a total of 40) of the cases (commonly 1–4 authors per case) take the reader through the steps in the procedure, with a final set of postprocedural images shown.

There is minimal reliance on

is (“distal embolic protective device”) or what “OTW” represents (“over the wire”).

By going through the cases, a reader can see, for example, the catheter type and size, and the types of guidewire, balloon catheters, stents (self-expanding/balloon-mounted), DEPDS, and clot-retrieval devices used in each case. Again, what is highly useful are the step-by-step bullet points concerning each procedure, with crisp images corresponding to each step. Accompanying a number of cases are images other than digital subtraction angiography, such as MR imaging, CT, intravascular sonography, diffusion-weighted imaging, MR angiography, CT angiography, perfusion-weighted imaging (with cerebral blood volume, mean transit time), and single-photon emission CT.

The series of cases selected is a complete set of representative material: For angioplasty and stent placement of extracranial vessels, the internal carotid, external carotid, brachiocephalic, subclavian, and vertebral arteries are shown (most with multiple examples of varying complexity). Similarly in the intracranial vessels, angioplasty/stent placement of the internal carotid, posterior cerebral, middle cerebral, vertebral, and basilar arteries is shown. Many examples of treating acute cerebral ischemia (15 cases) and progressive/fluctuating ischemia (10 cases) are demonstrated. With these cases, one sees how and under what circumstances ischemic lesions are treated.

Treatment of aneurysms, arteriovenous malformations, and fistulas is particularly well illustrated, and one quickly understands advances made in this field in terms of approach and devices/material currently used, including supplementary radiation (gamma knife). Tumors treated partially or fully include meningiomas (3 cases), paragangliomas (3 cases), juvenile nasopharyngeal angiofibromas (2 cases), choroid plexus papilloma (1 case), hemangioblastoma (1 case), and metastatic vertebral tumor (1 case). Throughout the text and as appropriate, key points, important protocols, and anastomoses are inserted as added material apart from the step-by-step accounting of the procedure.

This text is recommended for all neuroradiologists, regardless of whether they are actively involved in interventional procedures.

DOI 10.3174/ajnr.A1684