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## **Emergency Radiology: The Requisites and Emergency Radiology: Case Review Series**

*AJNR Am J Neuroradiol* published online 30 July 2009 http://www.ajnr.org/content/early/2009/07/30/ajnr.A1763.cit ation

This information is current as of April 20, 2024.

## **BOOK REVIEW**

## Emergency Radiology: The Requisites and Emergency Radiology: Case Review Series

J.A. Soto and B. Lucey. Emergency Radiology: The Requisites. Mosby Elsevier; 2009, 397 pages, \$102.00; and S.E. Mirvis, K. Shanmuganathan, L.A. Miller, and C.W. Sliker. Emergency Radiology: Case Review Series. Mosby Elsevier; 2009, 432 pages, \$52.95.

With the increased use of emergency departments (EDs) by patients with medical problems, whether their conditions are emergent or not, and with the need for specialized surgical care in cases of acute trauma, the ED radiologist now becomes the epicenter of patient triaging and diagnosis. When this reality is combined with the burgeoning of ED studies, particularly total body imaging with CT, it is no wonder ED/ trauma radiology has become a well-defined and critical part of our specialty. It is worth noting therefore the recent publication of 2 books, both of which follow the series in other subspecialty areas that preceded them. One is *Emergency Radiology: The Requisites* edited by Drs Jorge Soto and Brian Lucey, and the other is *Emergency Radiology: Case Review Series* by Drs Mirvas, Shanmuganathan, Miller, and Sliker.

Emergency Radiology: The Requisites is 397 pages and contains 12 chapters written by 25 contributors in addition to Drs Soto and Lucey. The 2 chapters that deal directly with neuroradiology are "Traumatic and Nontraumatic Emergencies of the Brain/ Head/Neck" and "Traumatic/Nontraumatic Spine Emergencies." The other chapters are "Chest Trauma," "Abdomen Trauma," "Extremity Trauma," "Extremities: Nontrauma," "Imaging Evaluation of Common Pediatric Emergencies," "Nontraumatic Emergency Radiology of the Thorax," "Nontrauma Abdomen," "Pelvic Emergencies," "Vascular Emergencies," and "Emergency Nuclear Radiology." When one considers those patients seen in the ED with acute or subacute neurologic disorders or with head/spine trauma, it holds that much of what neuroradiologists deal with daily could fall into these categories. In essence for diagnostic neuroradiology, the 78 pages on the head, neck, brain, and spine are a survey of our field. For example, the first chapter deals with hemorrhage (epidural, subdural, subarachnoid, intraparechymal); the various herniation syndromes; stroke caused by arterial or venous occlusive disease; arterial injury and other nontraumatic emergencies, such as acute hydrocephalus; infections; tumors; white matter lesions; toxic disorders; skull and facial fractures; and airway and pharyngeal injuries. These are all encountered routinely whether in an ED setting or not. What might have been a useful addition to this chapter would have been normal variants that simulate fractures, particularly in the temporal bone region where such variants are underappreciated.

In the chapter on the spine, of greatest interest is the proposed algorithm in dealing with known spine trauma or in patients with impaired mental status or unconscious state following an apparent traumatic event. The mechanisms of injuries and the imaging of those injuries are well described, though a more extensive description of the pitfalls in spine trauma imaging along with more examples would have added to this section. The spine chapter then goes on to show and describe many of the commonly encountered spine abnormalities, any of which could present in an emergency setting (tumors, primary/secondary; infection; vascular). As a short survey of spine pathology, this chapter is adequate for those needing a starting point in an ED rotation.

This is, in a sense, neuroradiology in a microcosm, because one can imagine that most entities seen on a daily basis even in a non-ED setting could, under the proper circumstance, be urgent cases. Residents starting off in their ED rotation, in which it is necessary for them to be familiar with these entities, will find these chapters helpful and frankly, like the entire Requisites in Radiology series, this should be required resident reading.

In *Emergency Radiology: Case Review Series*, there are 200 cases, presented in a manner similar to that in other volumes in this series of books. There are color plates in the beginning of the book, and they are referenced in those presentations in which such illustrations would be helpful in a particular case. These include 3D spine reformats, cerebral perfusion, skull rendering, and vascular abnormalities. The book has increasingly challenging cases in 3 categories under the headings of "Opening Round" and "Fair Game and Challenge." The last part of the book has an index of all the cases. Many of the cases are neuroradiologically based and straightforward. Despite this and the fact that most findings are obvious, there should have been some cases on an additional page following the quiz page, with labeling of the abnormalities.

Although the comments on each case are reasonable, there is often a lack of an actual description of the findings; an important addition, to this reviewer's eye, would have been to incorporate into the blank spaces (which are there to take notes) an actual dictation. Such books should include specific critical information we want to convey to the treating physician. Perhaps that could be incorporated into newer editions of all these volumes of this quiz series. Also we all recognize that a key factor in evaluating images is to actually find the abnormality. So in a sense, being blatantly shown the 1 or 2 images (out of a score of images) that are the key images does not simulate a real-life situation; but given the restraints of print publication, that is about the best that the authors of the quiz case series can do. This case review will be of interest to residents starting their ED rotation and, in that respect, would be a reasonable addition to a departmental library.

DOI 10.3174/ajnr.A1763



