BOOK REVIEW

Neuroradiology, 3rd Edition, The Requisites

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Scope: This third edition presents magnetic resonance (MR) imaging, contrast enhanced MR angiography (CEMRA), common carotid angiography, computed tomography (CT), CT angiography (CTA), and perfusion imaging for all, but most rare, diagnoses found in modern day central nervous system (CNS) imaging.

Over the course of 18 chapters and 600 pages, the text covers fundamental techniques of neuroimaging, cranial anatomy, brain neoplasms, vascular disease, head trauma, infectious/noninfectious inflammatory conditions, white matter disease, neurodegenerative conditions, congenital disorders, the orbit, sella, temporal bone, sinonasal disease, head and neck mucosal/extramucosal disease, and both degenerative and non-degenerative diseases of the spine. The final chapter deals with neuroimaging approaches and pitfalls.

Strengths: The work is straightforward, with details of each entity covered. Anatomical diagrams are simple and very clear. High-quality MRI, MRA, CT, and CTA images appear on almost every page. Techniques for and descriptions of T1-weighted images (T1WI), T2-weighted images (T2WI), diffusion-weighted images (DWI), fluid-attenuated inversion recovery (FLAIR) images, etc., are current, precise, and understandable/educational. The 31-page chapter on eye and orbit is especially instructive/useful.

Weaknesses: The greatest weakness is a lack of detailed attention to mass spectroscopy, which is becoming an important aspect in neuroimaging. Otherwise, there is very little one can say about weakness in the third edition. The first chapter, on techniques used in imaging, is a cursory overview of plain films, CT, CT perfusion, MRI, MRA, MR spectroscopy, cerebral angiography, myelography, ultrasound, nuclear medicine, sedation, and management of contrast reactions. The less than full detail may actually serve to conserve space for greater emphasis on results of/and interpretation of neuroimaging.

Recommended Audience: This book provides an essential overview for residents and fellows in neuro-ophthalmology, ophthalmology, neurology, neuro-surgery, and radiology. Neuro-ophthalmologists/ophthalmologists, at any stage of their career, will benefit from this text. Those practising clinicians, who order neuroimaging studies, will do well to read this book and better understand/help interpret studies on their patients.

Critical Appraisal: This excellent up-to-date text is a necessary book for ophthalmology, neurology, and neuro-surgery libraries as well as a must read for radiology residents interested in neuroradiology and as a reference for non-radiologists utilizing neuroimaging for evaluation and management of patients.

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