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BOOK BRIEFLY NOTED

Neuroimaging Clinics of North America: Viruses and Prion in the CNS, Vol. 18, No. 1

E. Turgut Tali, MD, guest ed. Elsevier; 2008, 196 pages.

his newest addition to the Neuroimaging Clinics of North America is an inclusive description of the pathology and imaging findings in diseases of the central nervous system (CNS) caused by viruses and prions. Edited by E. Turgut Tali, MD, from Ankara, Turkey, and co-authored by 21 contributors, this issue of the Clinics starts the reader off with an excellent introduction to these diseases, tabulating those viruses that cause encephalitis, describing the protean clinical manifestations of these diseases, introducing the laboratory tests to detect the viruses, and showing on MR imaging the parts of the brain that are the primary targets of these diseases. Rounding out this introduction is a beautifully illustrated chapter on the neuropathology of the CNS virus, complete with gross and histopathologic sections. A firmer understanding of the findings on MR imaging requires a careful reading of this chapter because the authors explain and illustrate the pathologic processes of herpes simplex, varicella zoster, the cytomegalic inclusion virus, the Epstein-Barr virus, progressive multifocal leukoencephalopathy, and retroviral infections, among others. Although there is some overlap between the material in this chapter and succeeding chapters, that is inevitable, given the different emphases (pathology, imaging, and clinical evaluation) that are present.

From an imaging standpoint, viral infections of the brain and spine can often be confusing, mimicking other entities such as multifocal primary tumors, metastasis, primary demyelinating diseases, or bacterial infections. This book remains one of the varied manifestations of viral diseases and prion infections of the CNS. Some of the spectra (e.g., those of herpes simplex virus type 1 encephalitis) are disappointing, particularly in the apparent baseline stability, but, of course, there is a relatively limited contribution of MR spectroscopy in these diseases. The patterns of involvement on MR imaging are critical and are stressed throughout this issue. It is even worthwhile to thumb through the illustrations to enforce the many ways these diseases manifest themselves, both in the brain and in the spine.

What readers of this issue will also find interesting are the 2 final chapters on prion diseases. The first of these 2 chapters gives the basic genomic and neuropathology of prion diseases, whereas the last chapter briefly summarizes and illustrates the MR imaging appearance of Creutzfeldt-Jakob disease.

This 196-page monograph is highly recommended to all neuroradiologists. In this reviewer's opinion, it is the best summary in print of imaging combined with pathology in CNS viral diseases. DOI 10.3174/ajnr.A1196