The Neuropathology of Dementia, 2nd Edition


The authors state in the preface to this edition that their desire was to create a book that was comprehensive, readable, and useful. They have succeeded admirably. This volume is considerably expanded relative to the first edition. Many new authors have been enlisted to write in their areas of expertise, including experts from the United Kingdom, Australia, Finland, and Sweden, in addition to the United States.

The first six chapters cover information necessary for evaluation of dementia brains in general, ranging from clinical definitions to molecular diagnosis of dementia. Especially well done is Chapter one, which contains excellent descriptions of clinical and pathological correlative studies in Alzheimer disease (AD), variants of AD, and other dementias. Chapter three details a practical approach to the pathological diagnosis of a dementia patient. This chapter provides a thorough approach for the assessment of a dementia brain that I have not previously seen so completely presented.

Chapter seven presents a discussion of the neuropathology of the aging brain and its relationship to AD, a topic new to this edition and reflective of the recent focus and progress in research in this area. The chapter on vascular dementia (Chapter 13) is particularly well done, providing an in-depth review and synthesis of clinical and pathological studies of this difficult area.

Chapter 17 provides a complete review of prion diseases including presentation of clinical and pathological diagnostic criteria, as well as appendices of procedures for PrP immunohistochemistry and Western blot analysis of Creutzfeldt-Jakob brain tissue.

The later chapters in the book cover less common diseases associated with dementia. Chapter 19 discusses hydrocephalus, in particular, normal pressure hydrocephalus, a topic currently receiving attention by the lay press. These chapters will be especially helpful to those searching for rare causes of dementia as they evaluate an autopsy brain.

Overall, this volume presents an excellent resource for those clinicians and pathologists engaged in the evaluation of dementia patients. The editors have collected authors who present both practical yet comprehensive information on the neuropathology of dementia, which up to now has not been collected in one volume. I am certain I will be frequently referring to its pages for help in the evaluation of my cases!

Elizabeth J. Cochran, MD
Chicago, IL

Atlas of Neuromuscular Diseases: A Practical Guideline


The authors present an Atlas of Neuromuscular Diseases written for "students, residents, physicians and neurologists who do not specialize in neuromuscular diseases" (italics added). They recognize the existence and widespread use—among neurologists and neuropathologists who specialize in neuromuscular diseases—of several excellent, authoritative texts and atlases, but offer their text as a uniquely "complete overview in a structured and easily comprehensible pattern supported by figures and pictures." Their complete overview is a strenuously anatomic catalogue of all the nerves in the human body, commencing with the olfactory and optic nerves, including all the purely sensory components of the other cranial nerves, and moving on to the spinal nerves divided into plexopathies (30 pages), radiculopathies (24 pages), mononeuropathies: upper extremities (30 pages), mononeuropathies: trunk (34 pages), mononeuropathies: lower extremities (39 pages), and polyneuropathies—including genetic, metabolic, systemic, infectious, inflammatory, nutritional, and toxic agencies that variously also afflict the previously designated nerves (88 pages), before listing disorders of neuromuscular transmission (22 pages), muscle and [sic] myotonic diseases (79 pages), and motor neuron disease (14 pages). Hence, the title of this book is misleading; it is more a compendium of clinical neurology touching on the anatomy and physiology and common and rare disorders of all nerves efferent from and afferent to the brain and spinal cord than of neuromuscular diseases per se.

This rigid format leads to textual redundancy, and includes opaque cross-referencing (e.g., Horner's syndrome is described in a figure legend but in the accompanying text only as "Horner's syndrome: see Horner's syndrome" [pp. 82–83], careless and self-contradictory usage (e.g., few would agree that the term "acoustic" nerve is synonymous with "cochlear" nerve [p. 62] or that 3 different neoplasms of the vestibular nerve are "Acoustic nerve neuma, Schwannoma," and "NF" [p. 66]), and puzzling juxtapositions of extremely rare causes next to common causes (e.g., in an appended General Disease Finder we read "Auditory nerve—Hearing loss: Refsum's disease, Cockayne Syndrome, mitochondrial disorders..." [p. 456]). The line drawings of nerves and circumjacent anatomic structures and many clinical macrophotographs are excellent; however, some of the latter fail to illustrate the condition (e.g., light reflection obscures the miotic pupil in Horner's syndrome [p. 82]). The color correction, contrast, labeling, and layout of many microphotographs (e.g., Figs. 10A–C and 11B [p. 272]) are seriously below modern publishing standards, and so fail to communicate, and the dark electron micrograph in Fig. 31B (p. 423) defies interpretation. Unfortunately, such examples are widespread. In such a luxuriously printed book, with spacious layout and wide margins, it is sad to report that the actual photographs are few in number and small in size—far fewer and far smaller than would justify calling this book an atlas. Though this book may be useful for neurologists in training or in practice, it contains little of interest to neurologists involved in the diagnosis of neuromuscular diseases by nerve and muscle biopsy, or in experimental neurology.

David Wolfe, MD
New York, NY