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BOOK REVIEW

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A Review of *Color Atlas of Pathology of the Nervous System*

REFERENCE: Hirano, A., Iwato, M., Llena, J. F., and Matsui, T., *Color Atlas of Pathology of the Nervous System,* Igaku-Shoin, Ltd., Tokyo and New York, 1980, 211 pages, $74.00.

This atlas represents a compilation of illustrations and both gross and microscopic photographs of classic neuropathologic lesions and neuroanatomic structures. The authors have attempted to give the reader a brief photographic overview of the field of neuropathology. Indeed, many of the photographs are excellent, clearly demonstrating a pathologic process. The sections on congenital malformations, lipidoses, mucopolysaccharidoses, leukodystrophies, vascular lesions, normal anatomy of the spinal cord and brain, pathologic conditions affecting the cord, cerebral infarctions, infections, and intranuclear and intracytoplasmic bodies are especially well done. Occasionally, the magnification that was used was too low to clearly demonstrate the pathologic lesion, such as the microscopic photograph of the spinal cord illustrating loss of anterior horn cells.

Showing different views of a normal brain and correlating them with different lesions affecting the specific areas shown is an excellent concept. In the photographs of the coronal and horizontal sections, some form of identification as to the different neuroanatomic structures, either by number or by letter, would have added to the content. In the section on multiple sclerosis, some form of identification of the demyelinating lesions in the midbrain would have been helpful.

In terms of content, I believe overall this atlas is well done. There are two areas, however, in which I believe the authors may find themselves open to criticism. The first is the section dealing with neoplastic diseases. Reading the caption beneath olfactory groove meningiomas, one gets the impression that meningiomas occur here frequently. The commonest sites for intracranial meningiomas are the parasagittal location, then the lateral cerebral convexity, the falx cerebri, and the sphenoid ridge. This was my experience at the Cleveland Clinic and is the experience of many others at other institutions. The discussion of the treatment of astrocytoma with hemorrhage should have indicated that hemorrhage is more common in the high-grade astrocytomas than in the Grade I or II lesions. The discussion of medulloblastoma points out that these cells are immature and of uncertain origin. These lesions are generally regarded as primitive neuronal neoplasms. Also, there is no attempt to illustrate Homer-Wright rosettes, which most regard as a form of neuronal differentiation and

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which serve to establish the diagnosis. The photographs used to illustrate the lesion referred to as cerebellar neuroblastoma are those of the desmoplastic variant of a medulloblastoma. I think the classification system developed by the World Health Organization should be applied to eliminate confusion, which in many respects was one of the basic points behind development of this classification system. In the photographic representation of malignant astrocytomas and glioblastoma multiforme, a brief statement as to what constitutes the diagnosis would have been helpful. One of the photographs labeled malignant astrocytomas (Grade III astrocytomas) is in fact that of a glioblastoma multiforme (Grade IV astrocytoma). Inconspicuousness of the vascular foot processes is not a light microscopic feature for the diagnosis of malignant astrocytoma.

The second area open to some question is in the generally excellent section dealing with secondary brain stem hemorrhages (Duret hemorrhage). Some would take issue with the statement that these lesions are usually seen throughout the brain stem. They are more often confined to the level of the mid-pons and above. They seldom involve the lower pons and medulla.

It is my feeling there were periodic failures in the development of a concise total intellectual picture of the pathologic phenomenon shown. Even though this is an atlas, I believe there was sufficient space to have included a sentence or two that would have helped give a clearer understanding of the fundamental concepts these excellent pictures were illustrating. For example, in the sections dealing with cerebellar abscess and chronic brain abscess, a brief statement on the underlying systemic disease (such as pneumonia) and the organisms most frequently involved would have given a more complete picture of the pathogenesis of the abcesses. Temporal lobe and border zone infarcts were well done; however, a brief statement regarding the vessels responsible would have added further comprehension of this pathologic phenomenon.

I believe the authors have done, overall, an excellent photographic presentation of neuropathologic lesions and the neuroanatomy that correlates with these lesions. I cannot help but feel this atlas suffers, as so many do, from too great a reliance on illustrations of pathologic phenomenon without sufficient correlative pertinent information that would greatly enhance the development of concepts of disease processes. The book emphasizes too much the "Corra-Lee" concept of pathology: What is a pathologist? Someone who looks at an organ, either grossly or microscopically, goes to a book, and finds a picture that looks similar. It is important that the reader come away with a concept of pathologic process. I think this is especially important in atlases, for they generally are used not by specialists in that particular discipline but rather by medical students, residents, and others who are in the process of developing concepts.