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Interactive Atlas of the Human Brain CD-ROM

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In point is the treatment of the speech and language system. A single 3D view of the left hemisphere is provided, showing focal activation in the inferior frontal gyrus (Broca area), the superior temporal sulcus (designated as Wernicke area), and the posterior aspect of the middle frontal gyrus (dorsolateral prefrontal cortex), with little discussion on the topic. This is a grossly simplified representation of the complex networks subserving speech and language functions, which have both functional imaging and clinical significance. An example of vision retinotopy is provided, but there is no discussion or activation views of higher visual functions. An example of bilateral intraparietal sulcus activation in response to imagining clock faces contains no discussion of the implications of visual attention or visuospatial processing. In short, this section shows a few patterns of activation in response to several tasks but in no way provides an understanding of the functional organization of the brain or the relationship of functional networks to anatomic gyral and sulcal landmarks. It is this section that most readily fails to reflect the title of this book.

Despite the shortcomings noted previously, *The Atlas of Morphology and Functional Brain Anatomy* provides an efficient and useful way to identify sulcal and gyral landmarks that one may encounter in day-to-day clinical practice. It also is designed in a manner effective at testing one's knowledge of brain anatomy and thus could be useful in training medical students, residents, and neuroradiology fellows. All in all, the *Atlas* is a useful addition to the neuroradiologist's library of brain anatomy texts. Although the authors give some attention to brain functional anatomy, a more expanded discussion of the integrated functions of the human brain and associated fMRI activation patterns would have improved the book as a resource for learning by students and others in the field.

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CD BRIEFLY NOTED

Interactive Atlas of the Human Brain CD-ROM

R.E. Kingsley, ed. Totowa, NJ: Humana Press; 2006. \$99.50.

This CD provides the viewer with both gross anatomic and MR imaging of the brain in an attractive and friendly interactive format. The anatomic (cryotome sections at 0.15-mm intervals) and the 3T MR images (fluid-attenuated

inversion recovery, T1, magnetization-prepared rapid acquisition of gradient echo, and T2 fast spin-echo) takes one through 3 orthogonal planes (axial, coronal, sagittal), providing the chance for structures to be either individually labeled (more than 170 in total) or provide full labeling in every section. For a general overview of cerebral anatomy, this by far supersedes the learning of brain anatomy by the usual type of atlas published in books and journals because of the interactive nature of the material. The fact that the MR images were obtained on a 3T system with a 1056×1528 pixel resolution has yielded high-quality detailed images.

The MR images were obtained from a healthy 63-year-old while the anatomic images were obtained from a 72-year-old donor. The use of the CD is intuitive and really requires no instruction on how to use the atlas; nonetheless, a help file explains the options available and how to use each. One simply clicks onto either the gross anatomic specimen or 1 of the 3 MR images, selects the plane in which to visualize the structures, and scrolls through the images. At any point, you click onto the label selector and choose the structure which you wish to identify. After this, you may click the structure label and up pops a definition of the structure, its function, and connections.

In summary, this CD should be required viewing for all residents and fellows in neuroradiology and should be in a department or sectional library. It provides a quick, painless, and instructive review of brain anatomy.

While there are more structures that could have been labeled (for example all the lobules of the vermis or specific brain stem nuclei or numerous white matter tracts), I presume the labeling was kept to a reasonable level so the images would not be unduly cluttered. What is particularly appealing is the way one can follow a given structure through multiple sections; this is particularly appealing for curved structures such as the fornix where one can trace its anterior-to-posterior portions from precommissural to postcommissural to columns to crus and do so in all 3 planes. By simply scrolling an arrow at the bottom of the image, you smoothly follow a structure through multiple sections.

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BOOKS RECEIVED

Imaging for Students, 3rd ed. David Lisle, ed. UK: Oxford University Press; 2007. 296 pages, \$45.00.