Sectional Anatomy Using the Personal Computer

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THE PURPOSE of these computer-assisted instruction programs is to provide students, residents, and clinicians with 93 MR images and anatomic drawings designed to accurately and conveniently display normal anatomy of the head, neck, thorax, abdomen, and pelvis in the coronal and axial planes on a personal computer (Macintosh or Windows). The MR images for head and neck anatomy were obtained using a 1.5 Tesla magnet (Signa; General Electric Medical Systems, Milwaukee, WI). T1W pulse sequences were performed utilizing a 3-mm slice thickness and a 512×512 matrix size. The MR images were installed in the computer using Ethernet and NCSA Telnet. To display the sectional anatomy of the trunk, the surface features of 25 serial sections from a male cadaver were photographed, drawn in pen and ink,

digitized, colorized, and labeled. Image was used to enhance both the images and drawings and convert them to the PICT format for export to MacroMind Director 3.0 for interactive animation. The slices have been linked for easy access to each other and to orientation views. Each slice features lists of anatomic terms arranged beside the screen image with "pop-up" leaders that identify the named structures. The programs also feature case histories and definitions with clinical correlations.

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