



**FIGURE 441e-42** Demyelinating disease (multiple sclerosis, [Chap. 458](#)). Axial T2-weighted MRI (**A, D**) and axial T2 FLAIR MRI (**B, E**) demonstrate multiple hyperintense lesions involving the periventricular and subcortical white matter (*arrows*). Although not always present, the appearance of a "lesion within a lesion" (*arrowheads*) is typical of demyelinating disease. Axial T1-weighted postcontrast MRI (**C, F**) shows partial enhancement of the lesion (*arrows*), which is often peripheral, incomplete, and "C-shaped" (*curved arrow*).



**FIGURE 441e-43** Neurofibromatosis type 1 ([Chap. 118](#)). Axial T2 FLAIR MRI (**A, B**) demonstrates multiple hyperintense lesions involving the brainstem and basal ganglia (*arrows*) as well as deep cerebellar hemispheres (*arrowheads*). Sagittal and coronal T1-weighted postcontrast MRI (**C, D**) shows enlargement of the optic chiasm with an area of enhancement on the left, representing an optic pathway glioma (*arrows*). Coronal STIR MRI (**E**) shows thoracolumbar scoliosis and a large paravertebral plexiform neurofibroma (*arrows*).