Radiation-induced spinal nerve root cavernous malformations as a rare cause of radiculopathy

Figure 1 MRI lumbar spine

(A) Sagittal T2; (B) sagittal T1 postcontrast; (C) axial T2; (D) axial T1 postcontrast. MRI lumbar spine demonstrates numerous small nodules (arrows, A and C) along the cauda equina with enhancement (arrowheads, B and D).

A 48-year-old man with Hodgkin lymphoma presented with insidious painless asymmetric ankle then thigh weakness 16 years after mantle-field radiation. EMG was consistent with a motor lumbosacral polyradiculopathy. CSF had 15 white blood cells/ μ L, protein 387 mg/dL, and normal glucose. Nodular enhancing lesions were seen on lumbar MRI (figure 1). Caudal root biopsy demonstrated mulberry-shaped vascular abnormalities (figure 2) and thickened endoneurial vessel walls without inflammation. Workup for leptomeningeal

Figure 2 Intraoperative images

Intradural exploration photomicrographs demonstrate small mulberry-shaped, vascular malformations along the cauda equina (arrows) consistent with radiation-induced cavernous malformations.

carcinomatosis and inflammatory and infectious disease was negative. High-dose steroids produced no clinical improvement. A diagnosis of radiation-induced cavernous malformations, a rare complication of radiation previously reported in the cauda equina, was made.^{1,2}

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