Chronic neuropathic shoulder pain

The diagnosis is just a “black hole”

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A 65-year-old man developed insidious and unprecipitated onset of right shoulder neuralgic pain which gradually worsened over 2 years. He experienced a burning pain in a 3-inch circular region in the posterior right deltoid area. The area was hypersensitive to light touch, causing him to cut holes in his shirts to avoid contact with skin. He denied neck or distal arm pain, weakness, and sensory loss. Neurologic examination, including arm strength and reflexes, was normal apart from hyperesthesia to pinprick in the region of his pain. EMG, including needle examination of his infraspinatus, deltoid, biceps, triceps, and C4 paraspinal muscles, and MRI of his brachial plexus were normal. A presumptive diagnosis of postherpetic neuralgia was made although he had never experienced a rash.

Figure Cervical intramedullary cavernous angioma

Cervical spine MRI demonstrates an intramedullary cavernous angioma (arrows) near the right dorsal root entry zone at the C4 level. Axial T2-weighted (A) and T2 fat saturation images (B) and sagittal T2 image (C).

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Cervical spine MRI demonstrated a 4×2.5 mm intramedullary focus of abnormal signal intensity on the right at C4, involving the lateral spinothalamic tract, with peripheral decreased and central increased T2 signal intensity and “blooming” on gradient echo series, consistent with a cavernous angioma (figure).

Intramedullary spinal cord cavernous angiomas are rare vascular malformations that may produce acute neurologic deficits or slow, stepwise deterioration resulting from microhemorrhages.^{1,2} MRI is the diagnostic modality of choice, typically showing small, round, well-defined lesions that are low signal with areas of increased signal within or around the lesion.² Conservative treatment is indicated for small, asymptomatic lesions. Surgical resection is reserved for larger or symptomatic angiomas. This patient was treated conservatively with neuropathic pain medications with limited benefit.

REFERENCES

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DISCLOSURES

The authors report no disclosures relevant to the manuscript. Go to Neurology.org/cp for full disclosures.