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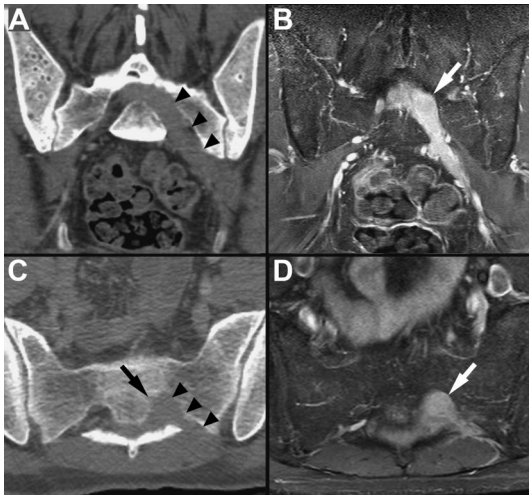
Mitchell S.V. Elkind, MD, MS

Teaching Neuro*Images*: Sacral spine chloroma

Marc C. Chamberlain, MD
Trent L. Tredway, MD
Donald Born, MD
James Fink, MD

Correspondence to Dr. Chamberlain: chambemc@u.washington.edu

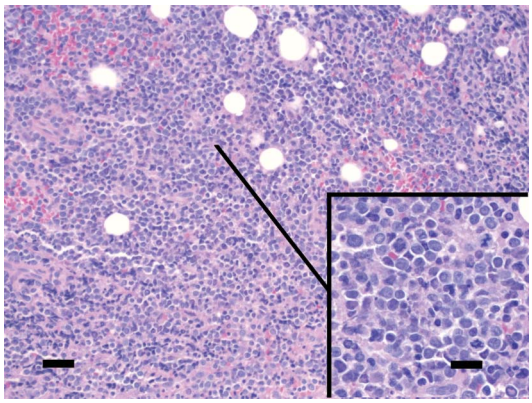
Figure 1 Intra-axial and extra-axial sacral chloroma



Coronal (A) and axial CT (C) images show left S2 nerve root enlargement (black arrowheads) with adjacent osseous erosion of the left S2 foramen (black arrow, C). Gadolinium-enhanced T1-weighted MRI with fat suppression shows corresponding sacral nerve root enhancement (white arrows) on coronal (B) and axial (D) images, consistent with sacral nerve chloroma.

A 23-year-old man with recurrent acute myeloid leukemia (AML) underwent successful reinduction and was judged posttherapy to be in complete remission. Soon thereafter, he complained of pain in his left buttock radiating into his left posterior thigh. Neurologic examination was unremarkable. Radiographic evaluation demonstrated a left S2 lesion suggestive of a nerve sheath tumor (figure 1). An open biopsy was performed that revealed a chloroma pathologically (figure 2), sometimes referred to as a myeloid sarcoma.[1,2] Most chloromas are found in patients with recurrent AML and are overwhelmingly intracranial.[1] Infrequently, chloromas are paraspinal, and in this location present with epidural spinal cord compression.[2] Intraspinal invasion by a chloroma is rare. Systemic evaluation confirmed recurrent AML, for which he was successfully treated with reinduction and whole-body irradiation followed by an allogeneic transplant. He is currently disease-free and neurologically asymptomatic 1 year posttransplant.

Figure 2 Medium- and high-power (inset) photomicrographs of a hematoxylin & eosin–stained section of the sacral lesion



Note the high nuclear: cytoplasmic ratio, irregular nuclei, frequent apoptosis, and scattered mitotic figures. Scale bars: medium power 0.4 mm; high power 20 μm.

AUTHOR CONTRIBUTIONS

Marc C. Chamberlain: drafting/revising the manuscript, study concept or design, analysis or interpretation of data, accepts responsibility for conduct of research and final approval, acquisition of data, study supervision. Trent L. Tredway: analysis or interpretation of data, accepts responsibility for conduct of research and final approval, acquisition of data. Don Born: analysis or interpretation of data, accepts responsibility for conduct of research and final approval, acquisition of data. James R. Fink: drafting/revising the manuscript, accepts responsibility for conduct of research and final approval.

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DISCLOSURE

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

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From the Departments of Neurology (M.C.C.), Neurological Surgery (T.L.T.), Pathology (D.B.), and Radiology (J.F.), University of Washington, Seattle.

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