Spinal LCH

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History

16 year old female with multiply recurrent Langerhans Cell Histiocytosis now with severe left sided neck pain.

Diagnosis

Langerhans Cell Histiocytosis

Discussion

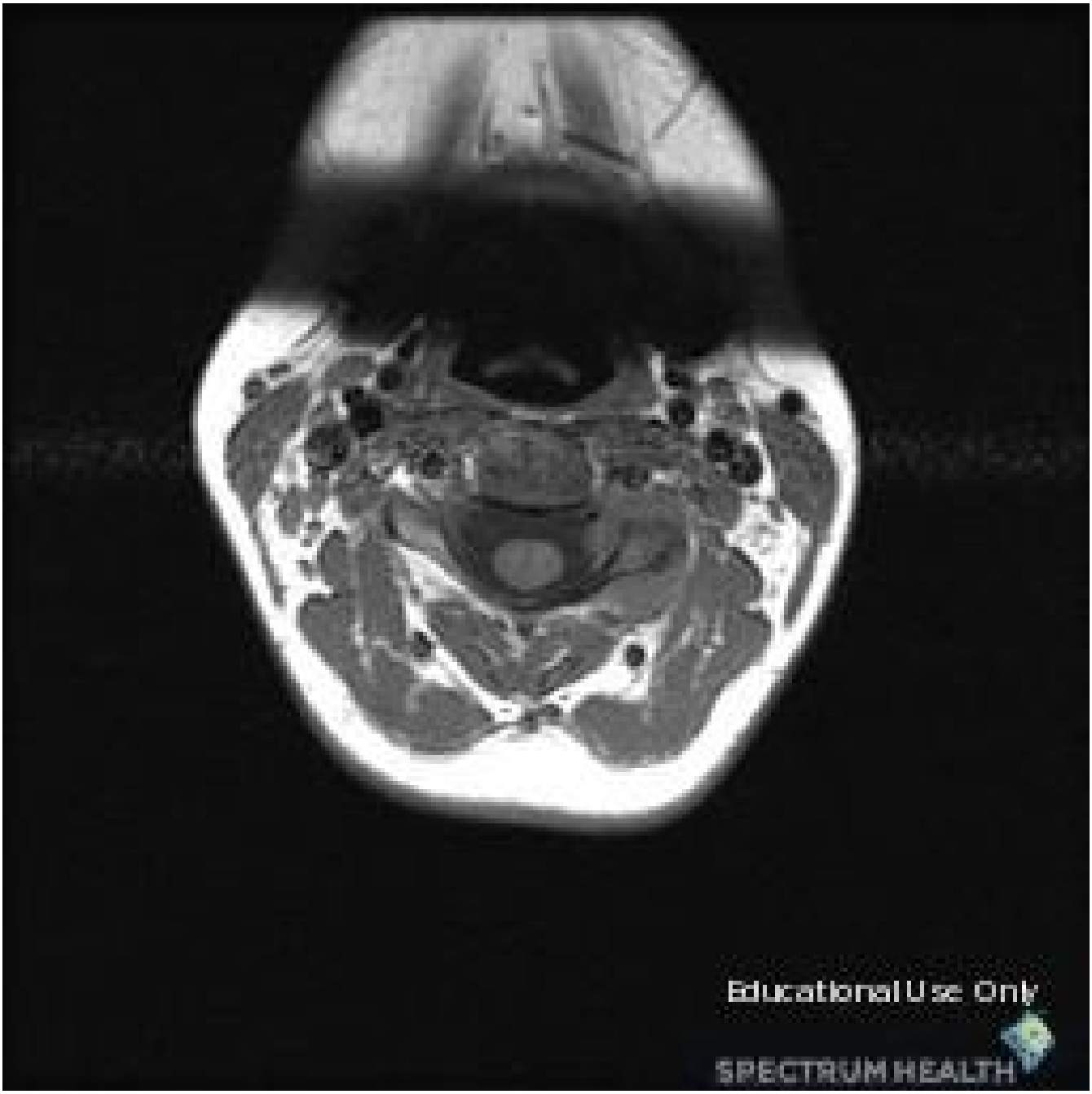
Langerhans cell histiocytosis (LCH) is related to unregulated proliferation of Langerhans cells, CD34+ presenting bone marrow derived cells. LCH is most common in caucasian males with a peak incidence between 1 and 5 years of age. LCH represents a spectrum of disease ranging from unifocal single organ to disseminated multi-organ disease.

Patients with unifocal osseous disease usually present local pain, tenderness and occasionally a palpable mass although symptoms depend upon the bone involved. Low grade fever, elevated sedimentation rate and elevated C-reactive protein may also be present.

LCH more commonly affects flat bones; 70% of lesions occur in flat bones compared to 30% in tubular bones. The most frequent sites of involvement in decreasing order are skull, femur, mandible, pelvis, ribs and spine. Lesions typically are medullary in location with secondary cortical involvement. LCH can have any radiographic appearance; in the spine the most common appearance is a collapsed vertebral body (vertebra plana).

Findings

MRI-Sagittal T1 and T2 images demonstrate hypointensity in the C3 vertebral body; axial T1 images demonstrate subtle disruption of the cortex of the left posterior elements with intermediate signal in the left C4 foramen abutting the thecal sac.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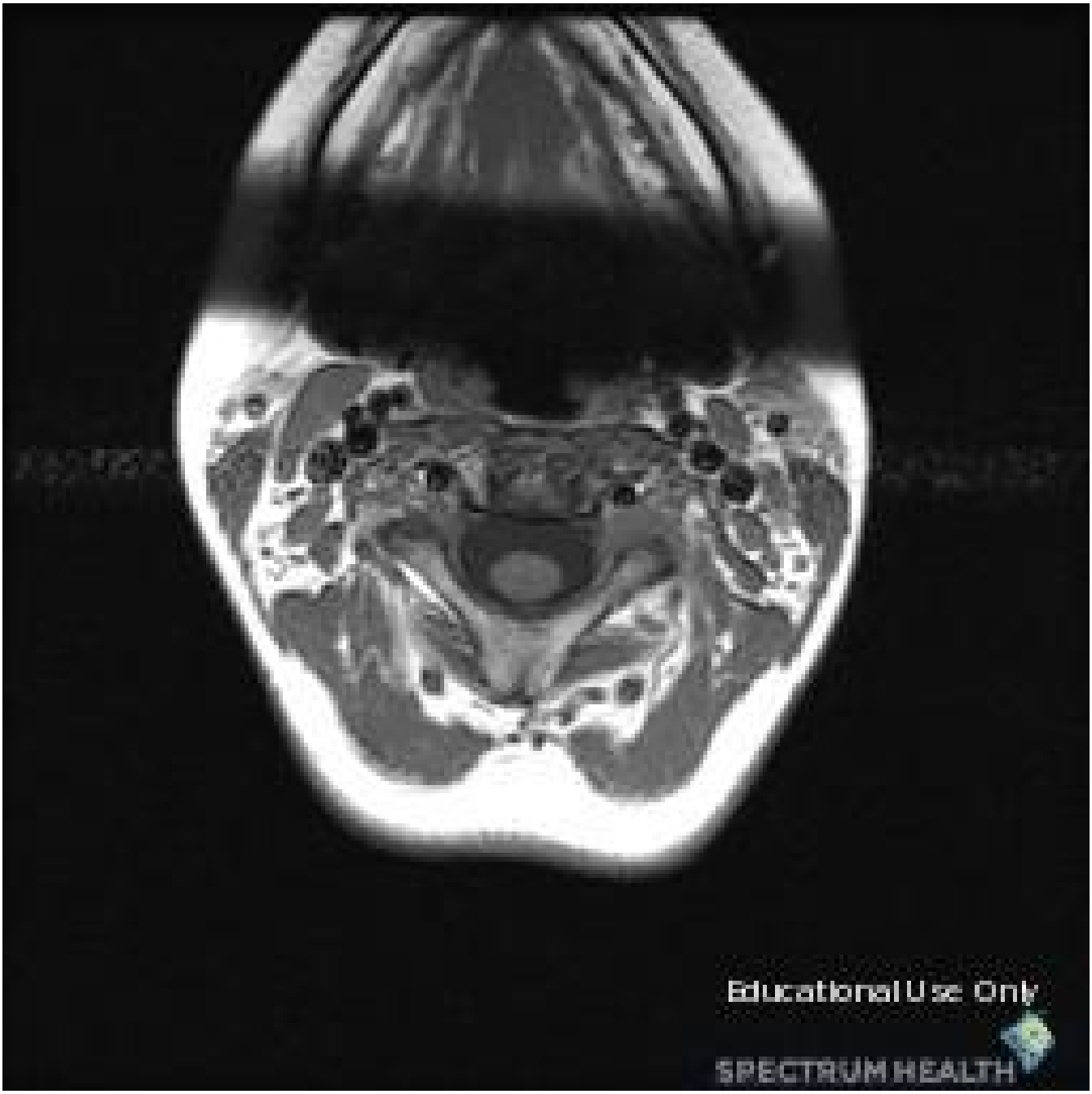
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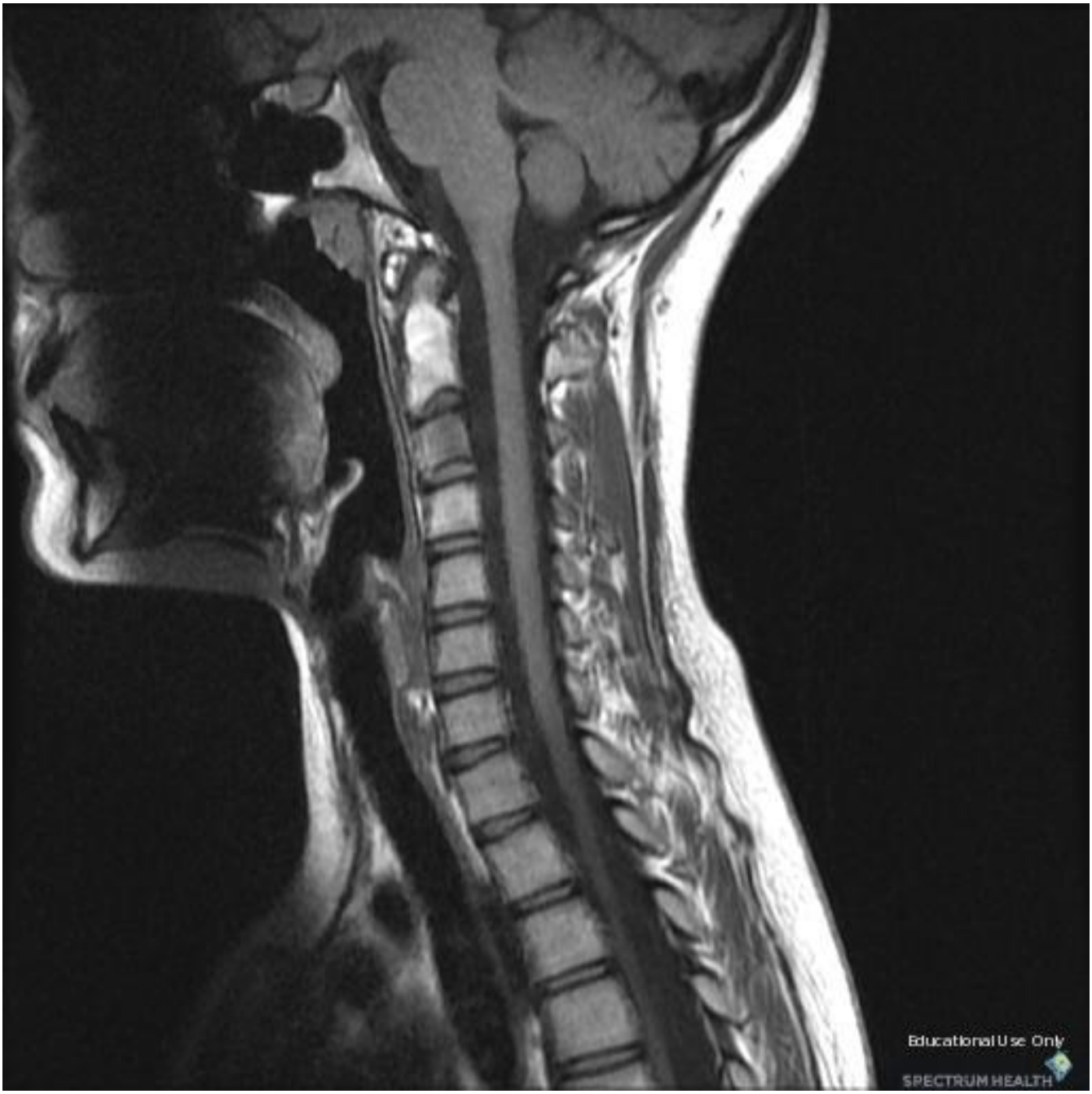
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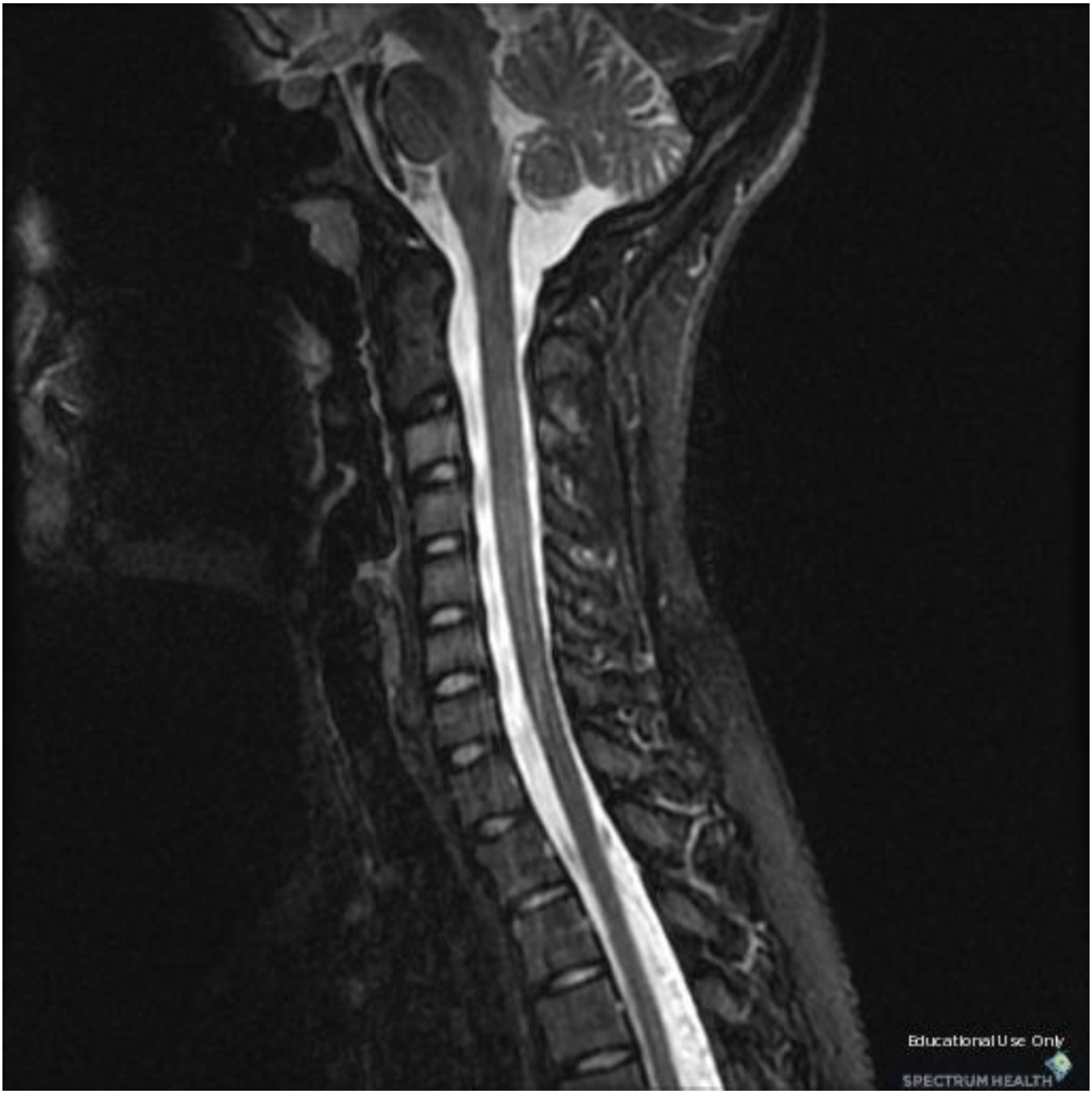
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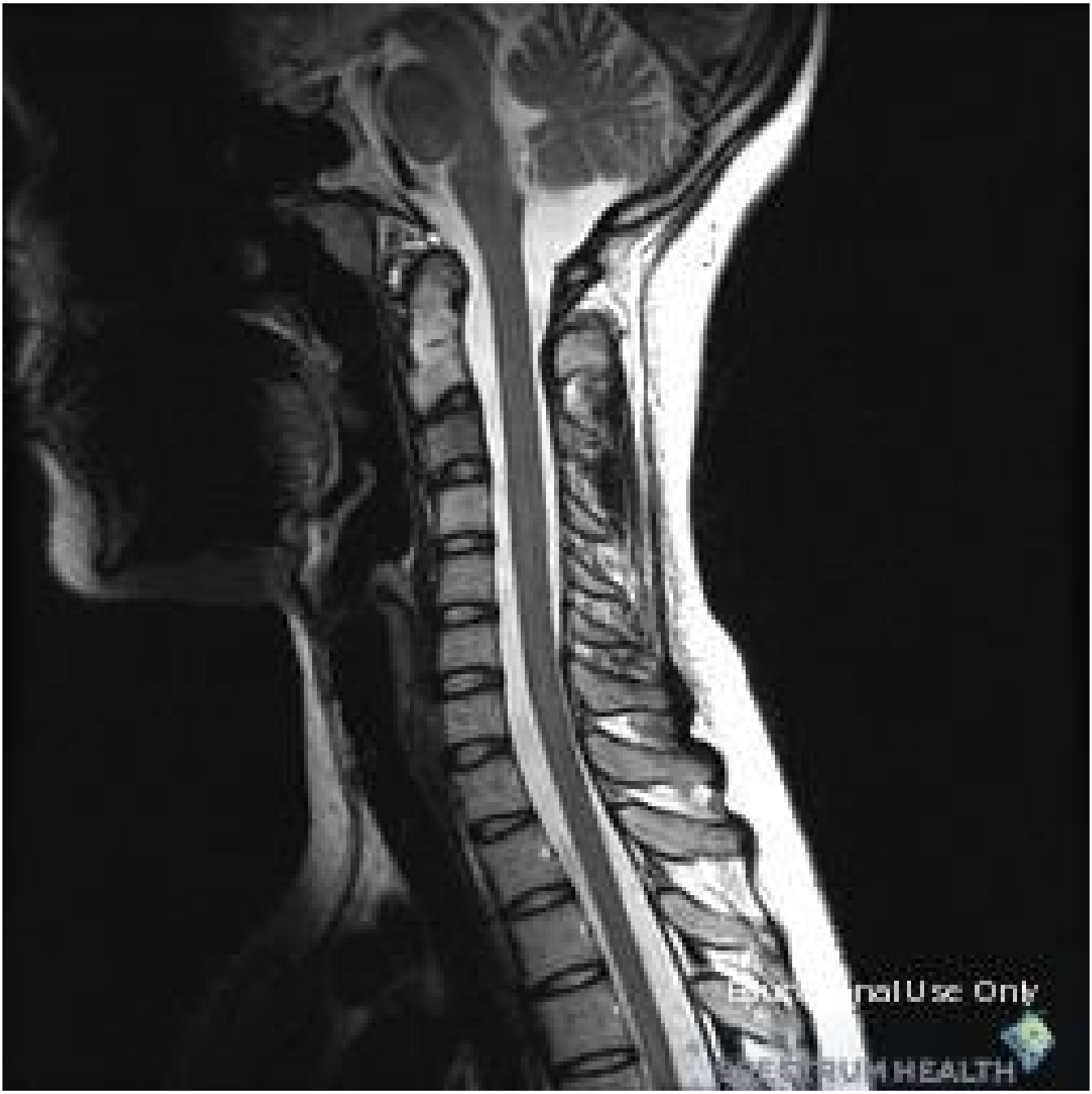
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