Teaching NeuroImages: Cervical synovial cyst leading to spinal cord compression

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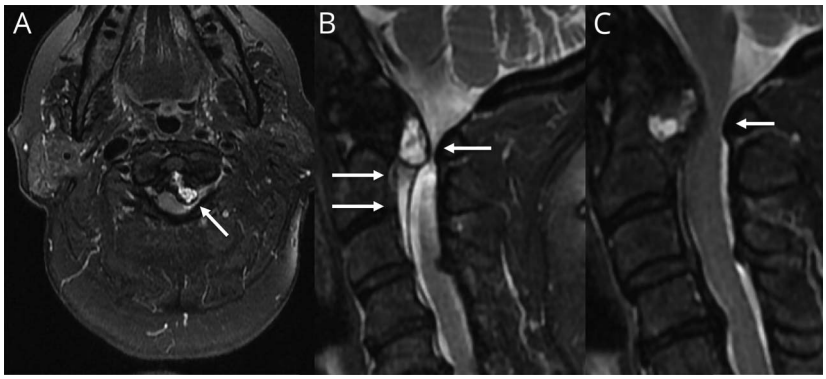
Figure MRI of spinal cord compression caused by a cervical synovial cyst



(A) Axial T2 fat suppression MRI demonstrates a large, well-defined, enhancing, extradural mass at C1/C2, causing significant spinal cord compression with evidence of intramedullary signal change. (B) A sagittal cut demonstrates the prominence of the synovial cyst, causing significant central canal stenosis and uplifting of the posterior longitudinal ligament. (C) Sagittal image.

Cervical synovial cysts are an uncommon degenerative finding that can lead to spinal canal stenosis, myelopathy, and radiculopathy.[1] Here we present the radiographic findings of a synovial cyst in a patient presenting with progressively worsening bilateral upper and lower extremity weakness. It is seen to cause prominent uplifting of the posterior longitudinal ligament and furthermore significant central canal stenosis (figure). CT-guided needle aspiration may provide symptomatic relief though frequently resulting in reoccurrence due to preservation of an intact synovium. Definitive treatment is surgical and may consist of laminoplasty, laminectomy, and in severe instances, spinal fusion.[2]

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Author contributions

I. Urits: drafting/revising the manuscript, data acquisition, study concept or design, analysis or interpretation of data, accepts responsibility for conduct of research and final approval, study supervision. G. Chesteen: data acquisition, accepts responsibility for conduct of research and final approval, acquisition of data, study supervision. V. Orhurhu: drafting/revising the manuscript, analysis or interpretation of data, accepts responsibility for conduct of research and final approval, acquisition of data. O. Viswanath: drafting/revising the manuscript, data acquisition, study concept or design, analysis or interpretation of data, accepts responsibility for conduct of research and final approval.

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Disclosure

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