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Destructive craniovertebral junction tuberculosis and antituberculosis treatment

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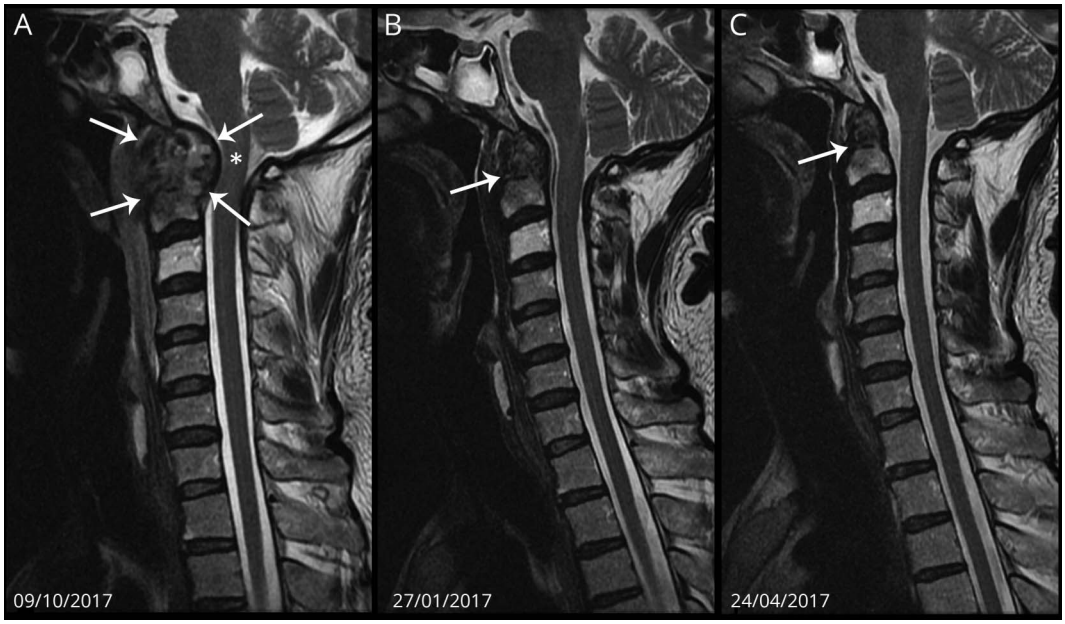
Figure Sagittal T2-weighted MRI of the craniovertebral junction



(A) Sagittal T2-weighted MRI of the craniovertebral junction shows destructive cortical bone changes with periodontal heterogeneous fluid collection causing significant compression of the spinal cord. On antituberculosis therapy, the size of the collection and associated bone and marrow changes are reduced (B) after 3 months; after 6 months, there is complete resolution of disease (C).

A 42-year-old man with cirrhosis had destructive craniovertebral junction tuberculosis on MRI. There was bone destruction involving the odontoid process, axis vertebra, and heterogeneous fluid collection (figure, A, arrows) compressing the spinal cord (figure, A, asterisk). Antituberculosis therapy (ATT) was initiated and follow-up scans (figure, B and C, arrows) showed complete resolution. Craniovertebral junction tuberculosis is extremely rare but life-threatening, occurring in 0.3%–1% of tuberculous spondylitis cases.[1] Almost all patients with neurologic deficits require early surgical intervention.[2] In high-risk surgical patients, awaiting ATT response to prevent surgery-related morbidity and mortality is worthwhile.

Author contributions

Dr. Philips: study concept, final approval. T.K. Jayarajan: image acquisition, final approval.

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Disclosure

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References

1. Goel A. Tuberculosis of craniovertebral junction: role of facets in pathogenesis and treatment. J Craniovertebr Junction Spine 2016;7:129–130.
2. Qureshi MA, Afzal W, Khalique AB, Pasha IF, Aebi M. Tuberculosis of the craniovertebral junction. Eur Spine J 2013;22:612–617.

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