

Uncommon cause of cervicobrachial neuralgia: epidural abscess complicating tuberculous arthritis

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DESCRIPTION

A 59-year-old patient was admitted to the rheumatology department with cervicobrachial neuralgia in the upper extremities and paresthesia. The symptoms appeared 3 months ago.

Physical examination showed neck stiffness with decreased sensitivity in the territory of the C4 root in both arms. There was no motor weakness or fever. The inflammatory blood markers were increased.

Spinal MRI was performed showing posterior epidural collection hyperintense in T2-weighted images (figure 1) with intense peripheral enhancement extending from C3-C4 to C4-C5 (figure 2). A facet joint arthritis at the level of C3-C4 was also noticed with a T2 hyperintense lesion of the spinal cord (figure 1).

The patient was immediately referred to surgery. The surgical treatment consisted of cervical laminotomy with drainage of the epidural collection. The culture of the abscess fluid revealed *Mycobacterium tuberculosis*. Long-lasting antituberculosis treatment was prescribed in addition to surgical treatment.

Cervical facet joint arthritis with epidural abscess is a rare condition.¹ It usually occurs after a local infection, trauma or surgical procedure.^{1,2} Patients with immunodeficiency and diabetes mellitus are often concerned. The most involved germ is *Staphylococcus aureus*.³ The epidural abscess can be responsible for

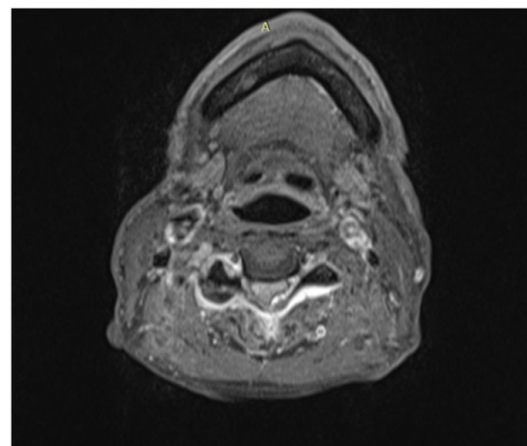


Figure 2 T1FAT SAT post-gadolinium axial images showing intense facet joints enhancement with epidural posterior collection.

spinal cord compression or nerve root impingement.

The management of cervical arthritis and epidural abscess is controversial. Some authors recommend starting with intravenous anti-biotherapy especially in patients without medical history. Other associate antibiotics and CT-guided drainage of the epidural abscess.³ Surgical treatment is needed in case of medullar

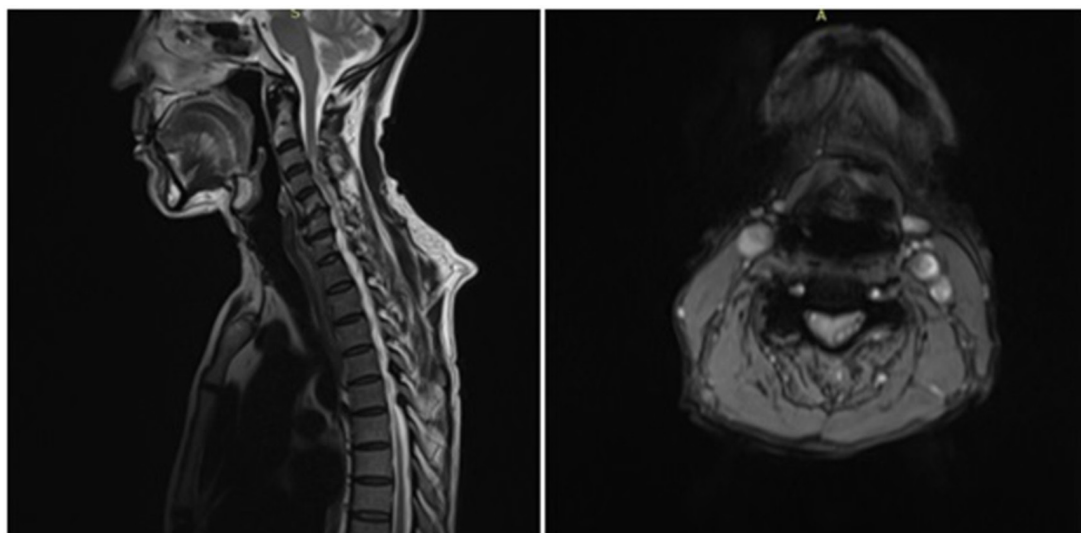


Figure 1 T2-weighted sagittal and axis images showing posterior epidural mass with mass effect on the spinal cord at C3-C4 and medullar oedema.



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Learning points

- ▶ Facet joint cervical arthritis is a rare condition. It is evoked in the case of cervical pain with neck stiffness especially in patients with immunodeficiency and diabetes mellitus. Cervicobrachial neuralgia is an uncommon revealing symptom.
- ▶ Spinal cord compression by an epidural abscess is suspected in the case of sensitive and motor deficiencies. Spinal MRI is then needed to detect epidural collections and look for medullar oedema.
- ▶ The treatment of facet joint cervical arthritis depends on the responsible organism. *Staphylococcus aureus* is the most frequently involved germ requiring intravenous antibiotherapy. *Mycobacterium tuberculosis* is rarely involved and requires specific antituberculosis drugs. In the case of medullar compression, surgical treatment is needed allowing to remove epidural abscess and to discharge the spinal cord.

compression; it allows to remove the abscess discharging from the spinal cord.

Contributors SK: author of the article. ML: coauthor participation in writing and bibliography. IG: provided follow-up. MBL: examined the patient in the emergency room.

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