

Two cases of spinal abscess

CASE 1

A 45 year old electrician presented with pains in the neck, radiating to the left shoulder lasting for 2 days. The pain was throbbing in nature, constant over the period and was unrelated to posture. There was no history of trauma to the neck, but he had had an episode of septicaemia with septic arthritis 3 months prior to the episode. Group A streptococcus was grown in blood cultures at that time and he was treated with oral antibiotics. In the past he was an intravenous drug abuser.

Clinical examination was normal and he had no fever. Plain X-ray of cervical spine was normal. He noticed worsening of pain in the next two days with no response to analgesics. The next day he developed sudden weakness of all limbs with urinary retention. Neurological examination showed a severe myelopathy with a spinal cord level at C7 level. An urgent MRI of cervical spine was performed which revealed an epidural abscess at C7-T1 (with some extension up to C5; Figure 1). Emergency decompressive surgery was done and the abscess was drained. There was partial neurological recovery. Post surgery broad spectrum antibiotics were administered, however culture of the pus grew no organism.

CASE 2

A 59 year old male woke up with severe neck pain. It was dull and radiated to shoulders. Pain worsened over the day and in the evening he noticed weakness of both arms and legs. This was associated with urinary retention and diminished sensations below neck. The motor power

was 3/5 in arms and 4/5 in legs. Blood cultures grew *Staphylococcus aureus*, CRP was elevated 270. Past medical problems included cellulitis of the right elbow.

MRI scan showed an extradural collection at C5/6, C6/7 levels (Figure 2). As there was no clear compression seen, surgery was not performed and he was managed conservatively. He made partial recovery from neurological damage.

DISCUSSION

These cases illustrate the presentation of paraspinal infections and also highlight the importance of prompt diagnosis and surgical intervention to prevent permanent neurological damage.

Epidural abscesses are mostly derived from haematogenous spread, either from cardiac source or vertebral osteomyelitis. Patients present with fever and leucocytosis but sometimes there are absent particularly in subacute or chronic cases. Plain X-Rays are often normal. MRI shows characteristic features of isointense abscess usually accompanied by spondylitis.

References

Mackenzie AR, Laing RBS, Smith CG, Kiaar GF, Smith FW. *Spinal epidural abscess: the importance of early diagnosis and treatment.* J Neurol Neurosurg Psychiatry 1998; 65: 209-12
 Kaufmann DM, Kaplan JG, Littman N. *Infectious agents in spinal epidural abscess.* Neurology 1980; 30: 844-50



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Figure 1

This case illustrates unusual presentation of spinal infection, it also highlights the importance of prompt diagnosis and surgical intervention to prevent permanent neurological damage.



Figure 2

MRI scan showed collection C5/6 C6/7 levels extradural space, but he was managed conservatively. As there was no clear compression seen, surgery was ruled out. Past medical problems included cellulites in right elbow.

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