E-Poster

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Bridging Impairment to Independence

Topic: Diagnosis

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BACKGROUND

Spinal epidural abscess (SEA) is a rare but potentially life-threatening infection of the epidural space, with an incidence of 0.2–2.8 cases per 10,000 hospital admissions. It typically arises from hematogenous dissemination, direct inoculation, or contiguous spread from adjacent infections. The most common causative organism is *Staphylococcus aureus*, accounting for approximately over 60% of cases. Risk factors include diabetes mellitus, intravenous drug use, immunosuppression, recent trauma, and invasive spinal procedures. However, SEA in healthy individuals without risk factors is uncommon. This case presents a rare occurrence of SEA secondary to *Staphylococcus aureus* bacteremia originating from an infected sebaceous cyst of the scalp.

CASE DESCRIPTION

A previously healthy young patient presented to the Accident & Emergency department with a one-week history of central thoracic back pain, progressive lower limb weakness, night sweats, headache, anorexia, and general malaise. The patient had an infected sebaceous cyst on the right scalp, which had been present for one week and exhibited signs of inflammation and purulent discharge. The patient had no significant past medical history or recent trauma. Clinical examination revealed paraparesis, was catheterized for urinary retention and started on bowel regime for the constipation. Blood cultures confirmed *Staphylococcus aureus* bacteremia. Spinal magnetic resonance imaging (MRI) revealed a T5-T11 extradural empyema with a T7-T8 paraspinal abscess. The patient underwent emergency T9/T10 fenestration, thoracic hemilaminectomy, and abscess evacuation. Prolonged intravenous antibiotics were administered, followed by oral antibiotics and rehabilitation. The patient was given intense inpatient rehabilitation and he made a full neurological recovery over few months, with MRI showing complete resolution of the epidural abscess.

DISCUSSION

Spinal epidural abscess is a medical emergency requiring early diagnosis and intervention to prevent irreversible neurological deficits. Although hematogenous dissemination from distant infections is a recognized cause, scalp sebaceous cysts are rarely reported as a source. This case highlights the importance of considering SEA in patients with back pain and systemic symptoms, even in the absence of predisposing factors. Delayed diagnosis can result in significant morbidity. Prompt surgical decompression, appropriate antimicrobial therapy, and multidisciplinary rehabilitation are essential for favorable outcomes. This case also emphasizes the need for intense rehabilitation following neurologic insult for the neurological recovery.

CONCLUSION

This case highlights the rare hematogenous spread of *Staphylococcus aureus* from an infected scalp sebaceous cyst, resulting in spinal epidural abscess. Early diagnosis, prompt surgical intervention, prolonged antibiotic therapy and intense rehabilitation are critical in preventing permanent neurological deficits and achieving complete recovery.

Statement of Disclosures

None

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