Clinical Reminders

Epidural abscess after dental extraction

A 77-year-old not immunocompromised woman developed neck pain 5 days after extraction of a fractured first premolar in the left maxilla. On admission, her neck stiffness was pronounced without focal abnormalities. Laboratory tests showed leukocytosis (26,200 per µl) and elevated C-reactive protein (20.1 mg/dl; normal <0.5). Her brain imaging was normal. Cerebrospinal fluid analysis revealed a granulocytic pleocytosis (395 per µl) with elevated protein (4,890 mg/l) and lactate (5.9 mmol/l). Magnetic resonance imaging of her spine demonstrated an enhanced epidural abscess extending from the C1 to T7 (Figure 1). Neurosurgical therapy was performed, and Strep tococcus intermedius (Milleri) was isolated. With additional antibiotic treatment, the patient recovered within 3 weeks.

Epidural abscesses are infections with serious complications [1]. This case reminds us that epidural abscesses can occur after an uncomplicated dental extraction, since S. intermedius (Milleri) is a typical oral germ [2]. Such a clinical condition has hitherto been described in just five case vignettes [3].

Key points

- Spinal epidural abscess is a critical disease.
- Strep tococcus intermedius (Milleri) can be the causative pathogenic germ.
- Via haematogenous spread abscess can follow dental extraction.

Conflicts of interest

None declared. Patient’s consent: obtained.

Authors’ contributions

All of the authors contributed equally to the presented work.

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References


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Figure 1. (A) Sagittal view of the spinal magnetic resonance imaging (T1 weighted with contrast) showing an epidural abscess in the posterior part of the spinal canal, extending from C1 to T7 (white arrows). (B) Axial MRI (T1 weighted with contrast) at the level of the second thoracic vertebral body showing the epidural abscess in the dorsal part of the spinal canal (white arrow) displacing the dural sac (arrowhead). (MRI, courtesy of Hans-Peter Dinkel, MD, PhD, Radiological Institute, Municipal Hospital Landshut).