

Epidural, paravertebral and bilateral psoas abscess after lumbar acupuncture

André Rosa Alexandre, Pedro Raimundo

Departamento de Medicina Interna e Medicina Intensiva, Hospital da Luz Lisboa, Lisboa, Portugal

Correspondence to

Dr Pedro Raimundo, p_oliveiraraimundo@yahoo.com

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DESCRIPTION

A 52-year-old Caucasian woman presented to the emergency department with worsening of her chronic low back pain along with de novo functional impotence of left lower limb with 1-week duration. She had been submitted to lumbar acupuncture for pain relief 2 weeks before presentation.

The patient was previously healthy except for her mechanical chronic back pain. She was chronically medicated with non-steroidal inflammatory drugs with partial relief. She had no relevant family history.

On clinical examination, she was conscious and reactive, afebrile and haemodynamically stable. She was eupnoeic and her oxygen saturation on pulse oximetry was 99%. Her lumbar spine was tender to palpation. A mass with purulent discharge was found on the inner side of her right thigh and the neurological examination revealed a slight proximal strength deficit (grade 4 in 5) on her left lower limb. The remainder of the physical examination was unremarkable.

A leucocytosis ($18.2 \times 10^9/L$) with neutrophilia (87%) was found along with elevated C reactive protein (25 mg/dL), reduced haemoglobin with normocytic normochromic anaemia (8.5 g/dL) and thrombocytosis ($872 \times 10^9/L$). The renal and hepatic functions were within normal range.

A lumbosacral magnetic resonance showed an infectious involvement of the left facet joint between L4 and L5 vertebrae (figure 1) due to direct inoculation by the acupuncture needle. This joint infection was complicated by an extensive epidural abscess from T12 to S1 vertebral level (figure 1) with a large bilateral spill to psoas and



Figure 1 Lumbosacral magnetic resonance showing left facet joint infection between L4 and L5 vertebrae (arrow) and an extensive epidural abscess (arrowhead) from T12 to S1 vertebral level.

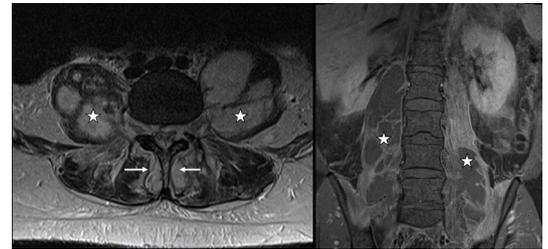


Figure 2 Lumbosacral magnetic resonance showing the presence of bilateral paravertebral (arrows) and psoas abscesses (stars).

paravertebral abscesses (figure 2). There was also evidence of purulent discharge tracking down from the right psoas abscess to the skin of the inner face of the patient's right thigh along the iliopsoas tendon sheath. Blood and aspirate cultures from the abscesses were positive for methicillin-resistant *Staphylococcus aureus*. Both transthoracic and transoesophageal echocardiograms excluded the presence of infective endocarditis.

After being assessed by the Neurosurgery Team, the patient was admitted to the ward. She was treated conservatively with percutaneous drainage of the abscesses along with a 6-week course of intravenous vancomycin and an additional 2 weeks of oral linezolid after hospital discharge.

She made a full recovery and has been followed up in our outpatient clinic for 2 years without further events.

This case highlights the importance of correctly treating chronic back pain. The prevalence of this condition can reach as high as 25.4% of the adult population and increases linearly from the third decade of life on, being more frequent in women.¹ Failure in controlling back pain may lead patients to recur to forms of complementary and alternative medicine without evidence-based results to this indication. Acupuncture is one of these alternatives,

Learning points

- ▶ Chronic low back pain is a prevalent problem that demands correct treatment.
- ▶ Patients without symptomatic control tend to recur to complementary and alternative medicine mostly without evidence-based indication.
- ▶ Acupuncture, one of most commonly used complementary and alternative medicine techniques, has rare but potentially serious complications.



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and although generally assumed as safe and free of associated risks, may lead to serious complications. Our intention with this case report is to raise awareness of those risks. Deep infections, like the one we report here, are perfect examples. As far as we know, this is the first case reported in the literature of epidural abscess, and only the third of bilateral psoas abscesses, complicating an acupuncture procedure.^{2 3}

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