Spinal epidural abscess is a dreaded complication of epidural analgesia.[1] Early diagnosis and prompt treatment is crucial.

A 29-year-old male patient diagnosed with periampullary carcinoma was planned for laparotomy. An Epidural catheter was inserted preoperatively in the D6–D7 space, with strict asepsis. Postoperatively, epidural analgesia was continued using elastomeric pump (0.1% bupivacaine and 10 µg/mL morphine sulphate) at 8 mL/h. The preparation of anaesthetic solution for the disposable balloon pump was done using aseptic precautions. On day 3, a temperature of 100°F was noted. As a hospital policy, all catheters are removed on day 4. As pain, tenderness and minimal pus were present at the catheter site, a swab was collected from around the insertion site at removal. Injection amoxicillin-clavulanate 1.2 g was administered intravenously every 8 h. As fever continued, injection meropenem 1 g intravenously 8 hourly was started. Computerised tomography of the abdomen did not show any infection. The epidural site remained tender, erythematous [Figure 1] and incision and drainage was done on 7th postoperative day. Minimal pus was drained, the infection was adjudged to be superficial. The patient had backache with no radicular or meningeal signs, which settled in 24 h. Over the next 72 h, the patient was afebrile with persistent leucocytosis [Table 1]. Skin swab culture grew methicillin-resistant *Staphylococcus aureus*. In view of clinical improvement, the patient was discharged home on day 10. As per protocol, the patient was educated about the early signs of epidural abscess and given an information leaflet with an emergency contact number.

On day 11, the acute pain service was contacted by a relative reporting that the patient had developed acute-onset weakness of lower limbs, with urinary retention. The patient reported back to the hospital. Physical examination revealed bilateral sensory and motor loss below L1. Magnetic resonance imaging of the spine showed an epidural abscess causing cord compression from D2 to D6, [Figure 2]. Emergency decompression was performed within 6 h and the patient was started on injection dexamethasone 4 mg intravenously 8 hourly for 48 h, and injection vancomycin 500 mg 12 hourly for 14 days. The patient made a good neurological recovery in 72 h and was eventually discharged. On follow-up, he had no residual motor weakness or bladder/bowel dysfunction.

Epidural space infection may occur during catheter insertion or subsequently due to skin contamination, haematological or intraluminal routes.[2] In this case, skin contamination and spread to the epidural space was the probable cause. As a hospital policy, in all cases along with the skin swab, the epidural catheter tip is also sent for culture. This was missed in this case. However, a positive epidural catheter tip culture alone is not a reliable predictor of epidural space infection,[3] and the role of empirical extended antibiotic course to treat colonisation is unclear.[4] Our patient had fever and backache with no accompanying radicular signs, which subsided with symptomatic management. Six days later, he presented with paraparesis and urinary symptoms. The lesson learnt is that symptomatic improvement of backache, in the presence of catheter site infection, does not rule out spread of infection to deeper structures. Epidural abscesses usually present late and the signs and symptoms may not
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appear until after discharge.\textsuperscript{[2,5]} It is, therefore, crucial to ensure that patients are informed and understand the early signs of epidural infection and report immediately. An information card explaining early signs of infection, instructions and emergency contact telephone numbers should be issued. The favourable neurological outcome in this case was linked to prompt reporting and timely intervention. We conclude that patient information regarding early symptoms of epidural abscess is essential and must be a part of pain protocols in institutes offering epidural analgesia.

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Conflicts of interest

There are no conflicts of interest.

Table 1: Serial white blood cell counts at various time intervals

| Report Date | Preoperative | POD 0 | POD 1 | POD 3 | POD 4 | POD 5 | POD 6 | POD 8 | POD 12 | POD 24 |
|-------------|--------------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| WBC         | 9.2          | 18.7  | 18.0  | 10.0  | 11.3  | 12.9  | 10.4  | 12.8  | 12.6   | 15.6   |
| ANC         | 3.5          | 12.4  | 15.7  | 8.5   | 9.3   | 10.8  | 7.0   | 10.0  | 9.5    | 13.4   |

POD – Postoperative day; POD 0 – Day of surgery; POD 4 – Epidural catheter removed; POD 10 – Day of discharge; POD 12 – Emergency laminectomy done; POD 24 – Discharge after laminectomy; WBC – White blood cell count expressed as 10\(^9\)/L; ANC – Absolute neutrophil count

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Sir,

Coarctation of aorta accounts for 6% of congenital heart lesions. An uncorrected coarctation of aorta during pregnancy places the patient at risk for left ventricular failure (LVF), aortic rupture/dissection and endocarditis, and it represents a fixed obstruction to left ventricular ejection.\textsuperscript{[1]}

A 25-year-old female term gravida was admitted to the Department of Obstetrics with asymptomatic coarctation of aorta. Her pulse rate (PR) was 100 bpm and its volume was high in the right radial artery. Her blood pressure (BP) was 180/80 mmHg in the right upper limb, 130/90 mmHg in the left upper limb and 130/80 mmHg in the left lower limb. An ejection systolic murmur was heard in the left 5\textsuperscript{th} intercostal space and pansystolic murmur in the right second