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CASE REPORT

Textiloma: An uncommon complication of posterior lumbar surgery

Textilome : une complication rare de la chirurgie postérieure du rachis lombaire

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KEYWORDS
Textiloma;
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Risk factors

Summary A surgical sponge or cotton swab that is inadvertently left behind in a surgical wound eventually becomes a ''textiloma''. Such foreign material (also called ''gossypiboma'') can cause a foreign-body reaction in the surrounding tissue. Textiloma is mostly asymptomatic in chronic cases, but can be confused with other soft-tissue masses. Therefore, it is important to be aware of patients who present with a paraspinal soft-tissue mass and unusual or atypical symptoms. Imaging is helpful for arriving at the correct diagnosis. Here, we describe a case of textiloma in which the patient presented with low-back pain 6 years after laminectomy and lumbar discectomy. Spinal computed tomography (CT) and magnetic resonance imaging (MRI) revealed a mass lesion in the posterior paravertebral region.

Introduction

A retained surgical sponge is an infrequently reported condition that may be recognized incidentally during the early postoperative period, but may also lead to serious complications or remain asymptomatic for years [1]. Clinical manifestations of a retained surgical sponge are related to bacterial contamination and location of the sponge within the body cavity. Such foreign bodies often mimic tumors or abscesses both clinically and radiologically. They frequently occur after abdominal and thoracic surgery, but few have been linked to spinal surgery [2,3]. The incidence has been reported to be 0.7/10,000 patients, but this is probably an underestimation of the true numbers [3,4]. Many reasons

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Figure 1 Computed tomography (CT) shows a soft-tissue mass of 2—4 cm lying within the posterior paraspinal muscles at the L4—L5 level (arrow).

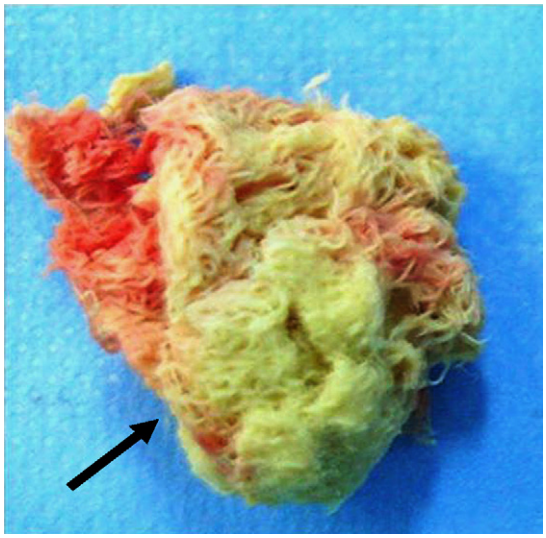

Figure 3 Macroscopic view of the mass extracted from the patient during the operation reveals the surgical gauze (arrow).

are cited as possible causes for retained foreign bodies, including surgical, patient and human factors [5]. Here, we describe a case of a retained surgical sponge that manifested 6 years after laminectomy surgery, with emphasis on the computed tomography (CT) and magnetic resonance imaging (MRI) findings.

Case report

A 42-year-old woman presented with low-back pain radiating down into the right leg that had persisted for 3 years. Six years previously, she had undergone laminectomy and discectomy because of L5—S1 intervertebral disc herniation. Physical examination indicated good health status. There was no focal swelling or erythema over the incision scar area. The straight-leg-raising sign was positive at 45° on the right. There was no weakness or sensory loss, although the right ankle reflex was absent. Routine blood chemistry disclosed a white blood cell count of 12,000 per cubic millimetre, and an erythrocyte sedimentation rate of 10 mm/h and C-reactive protein level of 0.9. Conventional radiography showed an L5 laminectomy defect.

CT demonstrated a ring-shaped hyperdense lesion, with a hypodense center, that was 4 cm × 2 cm in size and lying on the right side within the posterior paraspinal muscles, with no bone reaction (Fig. 1). MRI of the lumbar spine showed a mass lesion in the posterior paravertebral region that appeared to be hypointense compared with spinal cord tissue on T1- and T2-weighted images. T1-weighted MRI with intravenous infusion of contrast showed an enhanced hyperintense rim around the hypointense center, suggesting an abscess (Fig. 2, a—c).

The patient underwent surgery, which revealed that the encapsulated mass was, in fact, a gauze sponge, folded on itself, covered with granulation tissue. The gauze sponge was completely excised along with the fibrous capsule surrounding it (Fig. 3). Histological examination showed that the fibrous capsule contained epithelioid histiocytes and giant cells surrounding the foreign-body material. The diagnosis was foreign material granulation tissue (Fig. 4). The sponge was cultured for aerobic and anaerobic bacteria, but no bacterial growth was seen. The patient made a good recovery and was able to resume her normal activities.

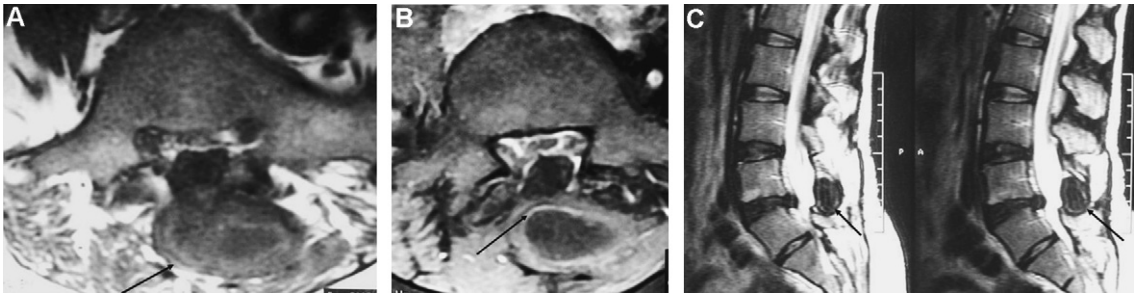

Figure 2 Axial T1-weighted magnetic resonance imaging (MRI) without (A) and with (B) contrast enhancement showing a ring-shaped, hypointense ellipsoidal lesion with a hypointense center in the right paravertebral soft tissue (arrow). A sagittal T2-weighted MRI (C) shows a posterior paravertebral mass with low signal intensity at the level of L4—L5 (arrow).