

Atypical Case of a Painful Presacral Tumor

Authors' Contribution:
Study Design A
Data Collection B
Statistical Analysis C
Data Interpretation D
Manuscript Preparation E
Literature Search F
Funds Collection G

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Patient: Female, 59
Final Diagnosis: Presacral teratoma
Symptoms: —
Medication: —
Clinical Procedure: CT • MRI • operation
Specialty: Surgery

Objective: Challenging differential diagnosis
Background: Retention of surgical items after a surgical procedure is not only a medical error, but can also lead to various unexpected complications and additional surgery procedures even years after the initial operation.
Case Report: A 59-year old woman was referred to our hospital with intermittent pain in the lesser pelvis for about three months. She had undergone laparotomy for cholecystectomy 24 years ago and adnexectomy more than 30 years ago. CT-scan and MRI indicated a presacral tumor, most likely compatible with a presacral teratoma. A laparoscopic resection of the tumor was performed. Intraoperatively the tumor showed no clear capsule and could only be resected by fragments. The pathological report analyzed textile fibres, diagnosing a teratoma. The patient showed an uneventful postoperative follow-up.
Conclusions: Most likely, the textile fibres originated from a sponge, which was retained during adnexectomy 33 years ago. There are numerous reports of retained surgical items discovered years after the initial operation. In literature, there are several reported cases of transmural migration of a sponge into the intestine, stomach and bladder. In our case, the sponge must have migrated to the deepest point of the retroperitoneum, which appears to be quite unusual, as no comparable case reports could be found. This case stresses the importance of the surgeon's awareness to particular appearances of a retained surgical sponge from a surgical procedure performed even decades ago. Additionally, this case report stresses the importance of meticulous analysis of individual patient medical history.

MeSH Keywords: Foreign Bodies • General Surgery • Surgical Sponges

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Background

Retention of surgical items after a surgical procedure is not only a medical error, but can also lead to various complications and additional surgery procedures even years after the initial operation. Theoretically preventable, the reported incidence is 1 in 6975 cases to 1 per 5500 cases [1,2]. We report a case of a painful presacral tumor. Finally, it was revealed to be a retained sponge from an operation performed more than 30 years ago. The sponge must have migrated to the deepest point of the retroperitoneum.

Case Report

A 59-year old woman was referred to our hospital with intermittent pressure and pain in the lesser pelvis for about three months. Neither weight loss nor night sweat were reported. She had undergone laparotomy for cholecystectomy 24 years ago and adnexectomy more than 30 years ago. No other diseases were reported. Except for painkillers, she didn't take any medication.

Physical examination of the abdomen showed normal bowel sound in all four abdominal quadrants. There was no abdominal wall tenderness and no palpable painful mass. Digital-rectal examination showed a painful presacral tumor. The rest of the physical examination was normal.

Laboratory analyses revealed no leucocytosis (8.1×10^9 cells/l), no hemoglobin deficiency (135 g/l), and no elevated C-reactive protein (9.5 mg/l). The urinary probe was normal. A colonoscopy three months ago came up without pathological findings.

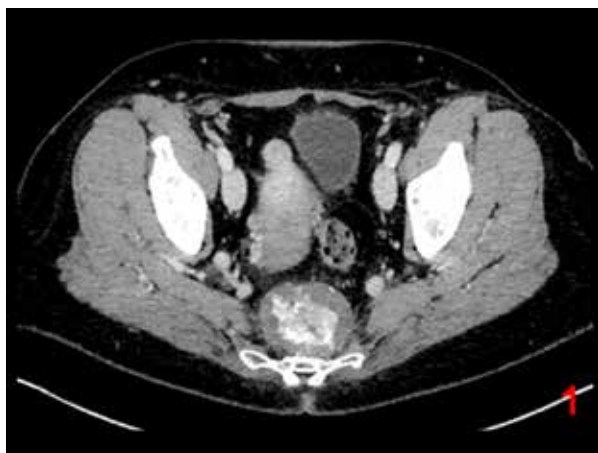


Figure 1. CT showed a well circumscribed heterogeneous presacral mass (57×40×43 millimeters) with coarse central calcifications and irregular peripheral enhancement after iv contrast. There was no infiltration of the surrounding tissue, bowel, or bone.

Computed tomography (CT) and magnetic resonance tomography (MRI) were performed, where a well-circumscribed heterogeneous presacral mass (57×40×43 millimeters) was found, with coarse central calcifications and irregular peripheral enhancement after iv contrast. There was no infiltration of the surrounding tissue, bowel, or bone. The mass was most likely compatible with a presacral teratoma (Figure 1). Based on these findings, a laparoscopic resection of the tumor was performed. Intraoperatively, the tumor showed no clear capsule and could only be resected by fragments (Figure 2). Macroscopically, the resected material was fragmented with a maximum diameter of 8.5 cm. Large fragments showed a fibrous capsule as margin. Most particles had a filamentous consistency like a sponge, easy to recognize by the unaided eye (Figure 3A). Histologically, the lesion consisted of birefringent fibres, encased from scar tissue with inflammatory infiltration by macrophages and foci of calcification (Figure 3B). Together with clinical data, the diagnosis of presacral textiloma was made.

The patient showed an uneventful postoperative follow-up and was discharged on post-operative day 10.

Discussion

The first recorded English lost swab case related to Dr John Dunlop. In 1928, following an operation intended for removal of the gall-bladder (though in the event, only a number of gall-stones were removed), the patient returned three months later. He had a second laparotomy, at which a retained pack of toweling was discovered. It had set up a fistula. The patient, an assistant bank manager, died a few days later, presumably of sepsis [3,4].



Figure 2. Intraoperatively, the tumor showed no clear capsule and could only be resected by fragments.

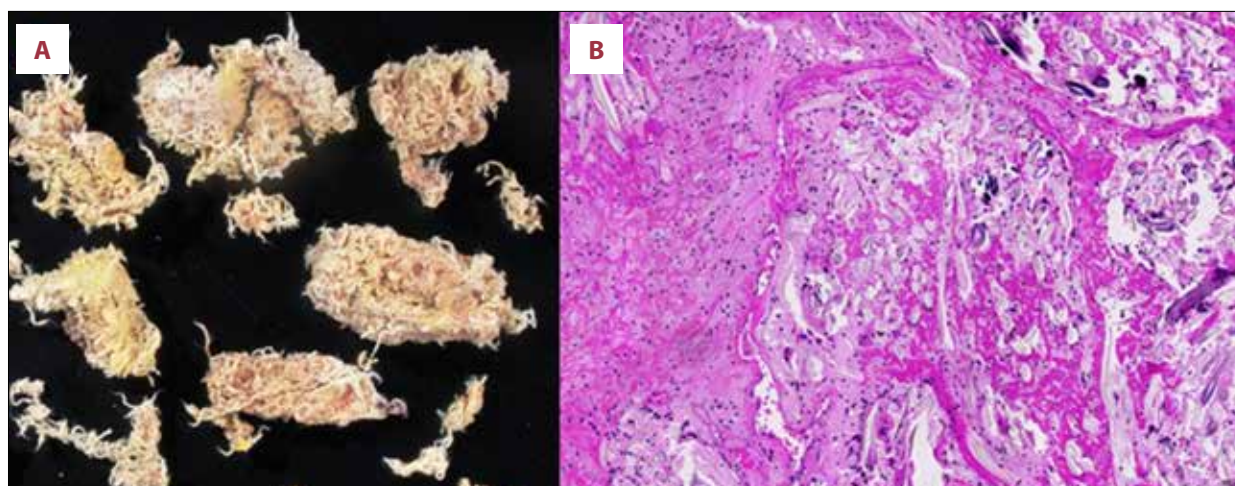


Figure 3. Laparoscopic resected pieces of a presacrally-located sponge simulating a pelvic tumor (A). The microscopic examination revealed birefringent material, scar-like fibrosis, and inflammation with macrophages and calcification of the tissue (B).

Since then, there have been many reports of retained surgical items. There are numerous reports of retained surgical items discovered even years after the initial operation [5]. They can cause multiple problems like readmission to hospital, reoperation (like in our patient), intra-abdominal abscess or sepsis, small bowel obstruction/intestinal fistulas, visceral perforation, or death [6]. The most common location of retained surgical items are the thoracic and abdominal cavity and by far the most commonly retained object is the cotton sponge [3].

Literature identified several risk factors leading to retained surgical items. It has been shown that BMI, unexpected intra-operative events, occurrence of any safety variance and procedure duration in hours were all independently associated with increased risk of retained surgical items [1]. In contrast, trainee (medical assistant) presence was associated with significantly lower risk [1].

Computed tomography is a modality of choice to exclude a retained surgical item. If the sponge does not contain a

radiopaque marker, the diagnosis cannot be made easily. Another rare diagnosis that can show an intraabdominal foreign body in the computed tomography is the phytobezoar [7].

In the literature, there are even several reported cases of transmural migration of a sponge into the intestine, stomach, and bladder [8]. In our case, most likely, the textile fibers originated from a sponge, which was retained during adnexectomy 33 years ago. The sponge must have migrated to the deepest point of the retroperitoneum, which appears to be quite unusual, as no comparable case reports could be found.

Conclusions

This case stresses the importance of the surgeon's awareness to particular appearances of retained surgical items from a surgical procedure performed even decades ago. Additionally, this case report stresses the importance of meticulous analysis of individual patient medical history.

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