

Case Report

Textiloma: a case of foreign body mimicking a dermoid / mesenteric cyst

B C Das¹, I M Khan², A Rahman³

Abstract

Items such as cotton or gauze pads can be mistakenly left behind during operations. Such foreign materials (called textiloma) cause foreign body reaction in the surrounding tissue. The complications caused by these foreign bodies are well known, but cases are rarely published because of medico-legal implications. Some textilomas cause infection or abscess formation in the early stage, whereas others remain clinically silent for many years. Here, we describe a case of textiloma in which the patient presented with huge abdominal lump 6 years after caesarean section operation abroad. Imaging revealed a dermoid / mesenteric cyst in pelvis and left lower abdomen. The case was treated successfully in Apollo Hospitals Dhaka and discussed here in the light of published literature.

Introduction: Textiloma is a non-medical term used to describe a mass of cotton matrix that is left behind in a body cavity during an operation [1-3]. Such foreign bodies can often mimic tumors or abscesses clinically or radiologically. Although these masses and their associated complications may occur, they are rarely reported due to medico-legal implications [4]. Most cases of textiloma in the literature have been connected with abdominal or thoracic surgery as because of frequent use of gauze and mop in these surgeries. Here, we describe a case in which a surgical mop was left behind during an operation for caesarean operation 6 years back. The patient presented 6 years later with a huge abdominal mass in lower abdomen, and imaging indicated a possible ovarian dermoid / mesenteric cyst.

Case report

A 35 year old Bangladeshi born American woman presented with a huge abdominal mass in her lower left

abdomen. She had undergone caesarean section 6 years back in USA. Since then she felt mild discomfort and a small lump in lower abdomen. The mass was gradually increasing and she did not have any fever, weight loss or pain.

Physical examination indicated good health status. There was a huge swelling (19x15cm) in left lower abdomen arising from pelvis and extended to left lumbar region. The mass was non tender, firm in consistency, moved side to side and had restricted mobility longitudinally. Examination of other system revealed normal. Routine laboratory testing (complete blood count, erythrocyte sedimentation rate, blood biochemistry panel) revealed nothing abnormal. Contrast enhanced computed tomography revealed a heterogeneous capsulated, smooth surfaced mass of 15 x 13 cm size with two radiopaque shadows inside located in the left pelvic region (Fig 1).

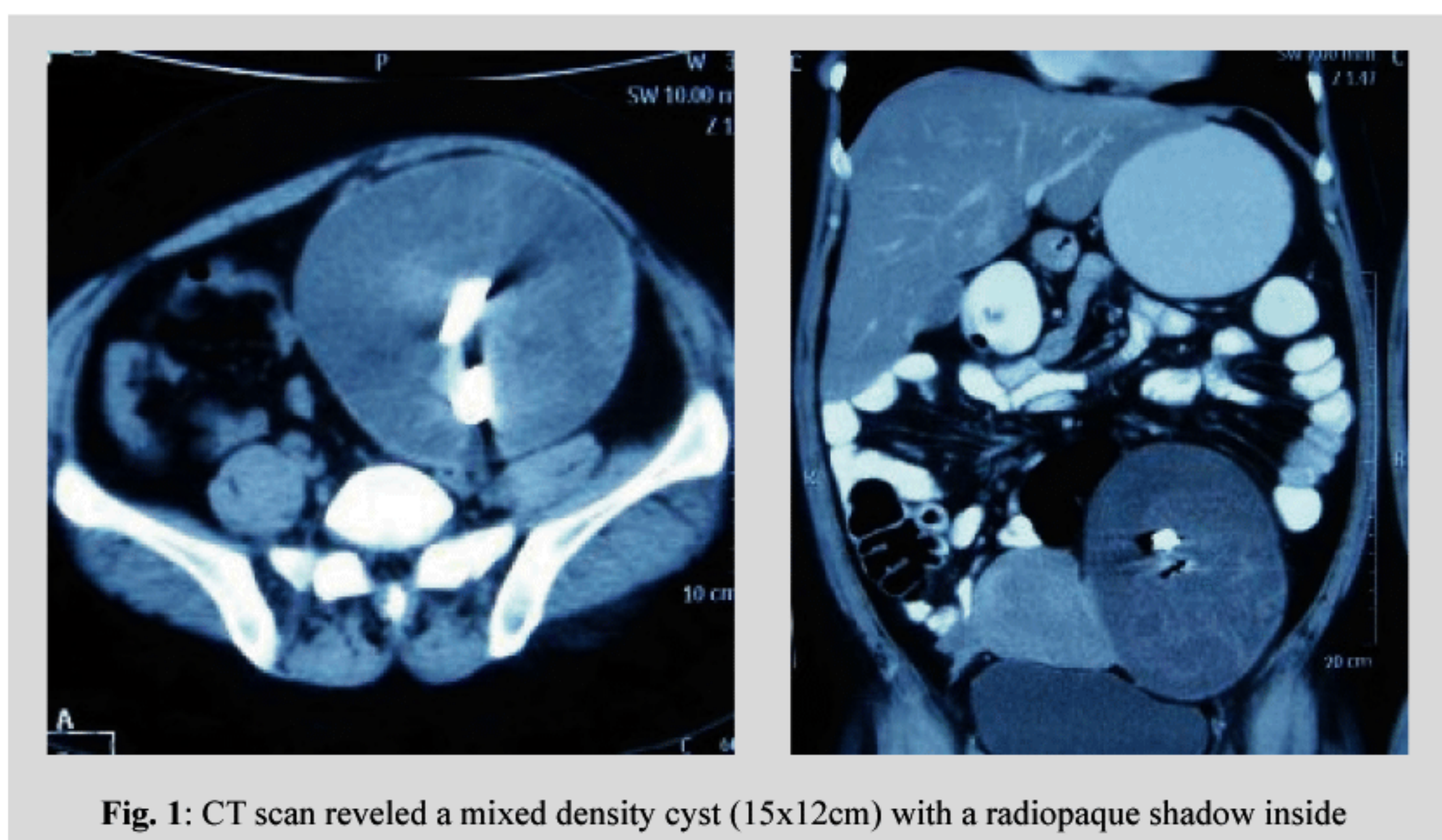


Fig. 1: CT scan revealed a mixed density cyst (15x12cm) with a radiopaque shadow inside

1. Specialist, Department of General and Laparoscopic Surgery, Apollo Hospitals Dhaka, 2. Registrar, Department of General and Laparoscopic Surgery, Apollo Hospitals Dhaka, 3. Senior Consultant & Co-ordinator, Department of General and Laparoscopic Surgery, Apollo Hospitals Dhaka

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It is slightly attached with fundus of the uterus but free from urinary bladder or colon with a suggestion of dermoid tumor of ovary. However, mesenteric cyst, retroperitoneal tumour could not be ruled out. On the basis of above findings, we took an opinion from Gynecologist. With the participation of Gynecologist, abdomen was opened through previous Pfannenstiel's incision. There was a cystic to firm lump in left pelvis extending to left lumbar region. The mass pressed the sigmoid colon to right, below attached with fundus of uterus, above and laterally bound with omentum. During separation of mass from surrounding structure it ruptured and purulent materials sucked out. Then cotton mop was discovered from the cyst cavity and removed (Fig 2).

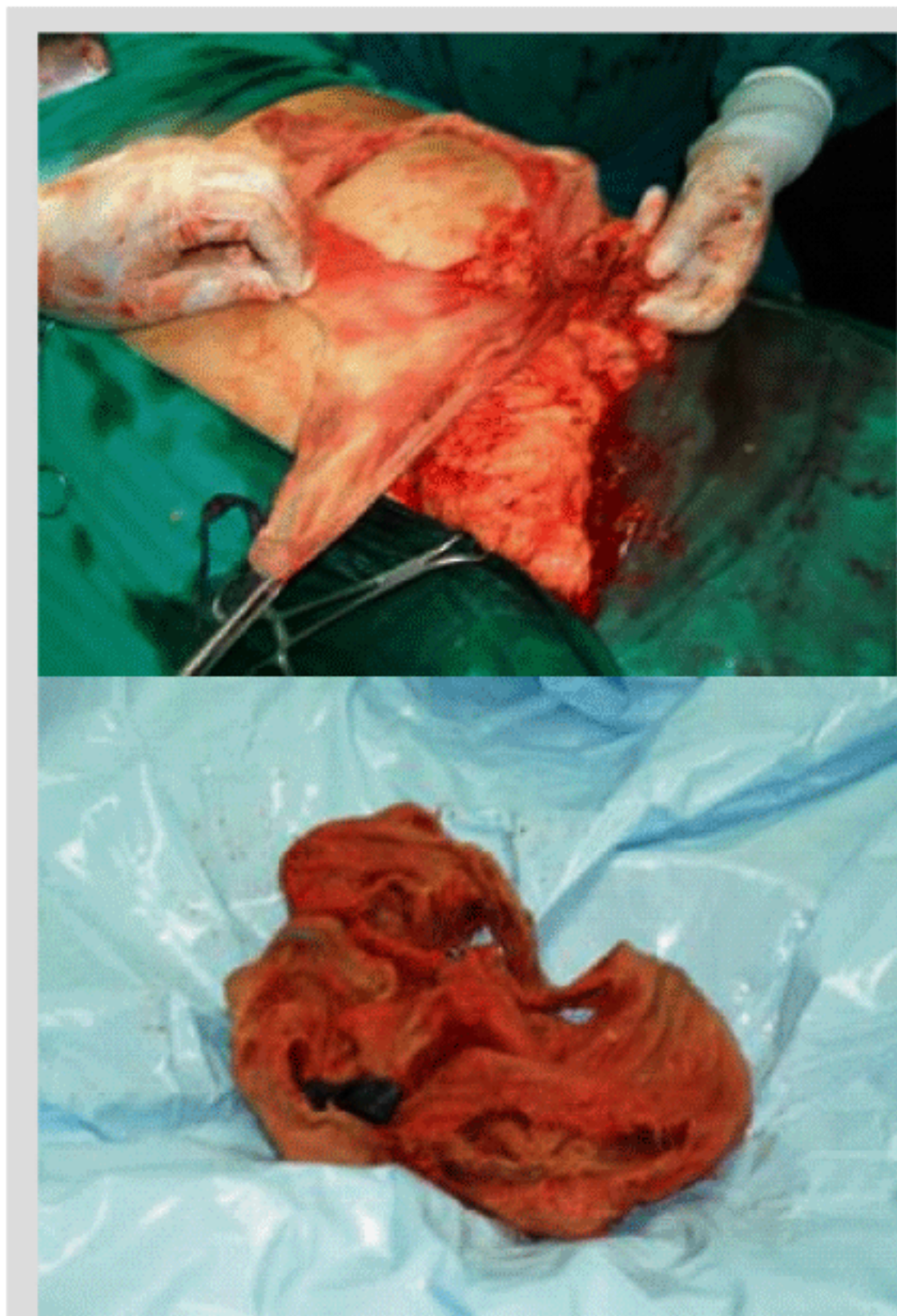


Fig.2: Over the past 6 years, this cotton MOP was inside abdomen of 35 year old lady. It was left in her abdomen during caesarean section

The cyst wall separated from other structures and excised. Abdominal cavity irrigated with normal saline and closed in layer keeping a drain in pouch of Douglas. Microbiological examination of pus revealed growth of staphylococcus aureus (scanty) and cyst wall histopathology report came as a chronic inflammatory lesion. Her postoperative course was uneventful and was discharged 5 days after surgery with good health.

Discussion

Cotton pads, towels and sponges are used to achieve hemostasis during surgical procedures. Although precautions are taken to avoid leaving such materials behind, mistakes do happen and the resultant foreign bodies can cause various clinical and radiological manifestations [5-8]. In the early period after surgery, these forgotten materials can lead to infections and abscess formation. However, some remain clinically asymptomatic for many years, and then cause a foreign body reaction in the surrounding tissue, with new clinical signs indicating significant mass effect [9-12]. Cotton is not the only material that can lead to such problems. The literature contains reports of other hemostatic materials (such as gelfoam and surgical) causing foreign body reactions that could not be distinguished from recurrent tumors on CT or MRI [1-14].

Cotton sponges and cotton fibers exhibit characteristic features on plain radiographs, whereas the findings on computerized tomography and ultrasonography are less diagnostic [15-17]. In this case also, the radiopaque portion of cotton mop is erroneously read in CT scan as tooth or bone fragment and labeled the mass as dermoid cyst of ovary. The MRI appearance of foreign materials that are left behind during surgery can differ greatly depending on the time since the operation and the type of foreign body reaction that occurs. There are two types of foreign body reactions: aseptic fibrous tissue reaction, which involves adhesion formation, encapsulation and granuloma formation, or the exudative-type tissue reaction, which leads to abscess formation [9,10,7,16].

Foreign bodies that are left behind during operations may organize and increase in size but such changes are not correlated with time. To date, the case reported by Taylor et al. [18] features the longest period from surgery to manifestation of symptoms. They detected an intrapulmonary foreign body 43 years after thoracotomy. The longest reported interval in the neurosurgery literature is 40 years. In that case, a cotton pad was left posterior to the lumbosacral vertebrae during a laminectomy operation, and the material eventually caused a cavitory lesion [17]. In our patient a textiloma is detected 6 years after caesarean section.

Conclusions

Civil lawsuits brought against surgeons for surgical complications are becoming more frequent, and this is prompting surgical teams to be even more careful. It is possible to overlook cotton and gauze pads in the surgical field. Such materials should always have a tag that allows them to be easily located and removed, and all materials that are placed in the wound temporarily, must be counted many times with meticulous care. Once hemostasis is achieved, the operative site should be flushed with saline and carefully examined for foreign materials, and thus in these ways surgical team can avoid such unwanted complications and unnecessary sufferings of patient.

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