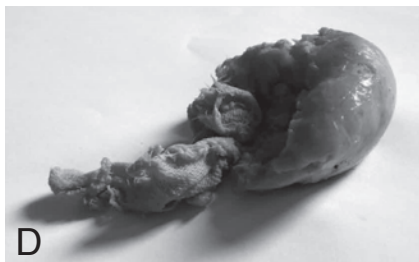
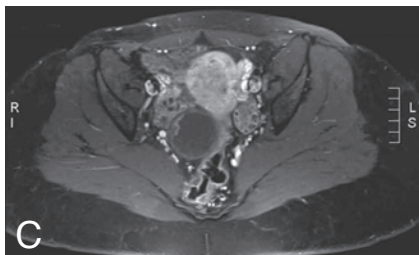
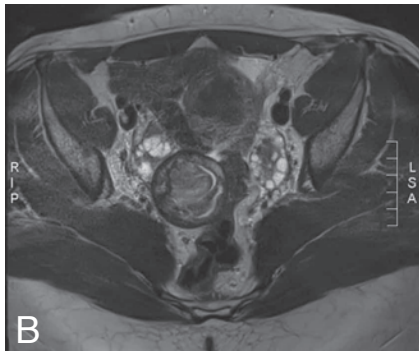
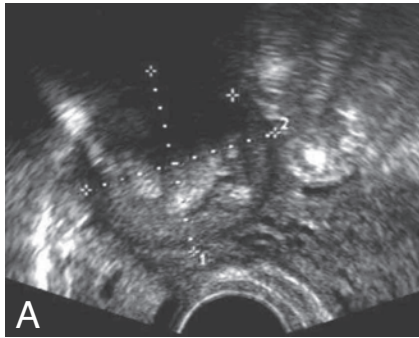


IMAGES IN CLINICAL RADIOLOGY



An unusual presentation of a pelvic textiloma mimicking a tumor

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A 21-year-old female patient consulted because of increasing vague pelvic pain. In her past history, an appendectomy was performed 15 years earlier. Endovaginal ultrasound showed an enlarged uterus with a nodular contour confirming the multiple leiomyomas. In the right pelvis a heterogeneous hypo vascular soft tissue mass was noted suspected to be an ovarian mass or a sub serous leiomyoma (Fig. A). At MR imaging, a right para-uterine mass was shown, sticking to the normal right ovary, excluding its ovarian origin. The mass had a hypointense signal on T1WI, heterogeneous hypo intense on T2WI and was delineated by a thick capsule showing enhancement after contrast injection (Fig. B, C). It had an exterrinsic mass effect on the cervical region and pushed the right ovary in an anteroposteriorly way. A pediculated fibroma was excluded because of its characteristics. At MRI we were unable to differentiate between an old postoperative hematoma and abscess, a leiomyoma with a cystic degeneration or a pseudo cystic mass. Therefore the pelvic mass was removed by laparoscopy. The surgery revealed a nodular mass with a thick fibro sclerotic capsule and some calcifications. After opening of the nodule it was found a retained surgical sponge revealing the diagnosis of a textiloma (Fig. D).

Comment

A textiloma is a mass that is created by a retained surgical sponge or foreign body where due to reactive inflammatory changes with formation of a tick capsule. The reported prevalence varies between 1/100 to 1/5000 after a pelvic intervention and around 1/1000 to 1/1500 after an intervention on the digestive tract (1). Normally the diagnosis will be made in the postoperative period due to abdominal pain or septicemia with formation of an abscess and/or a fistula. Rarely, due to the highly variable clinical and imaging presentation of this type of mass, the diagnosis is made on biopsy only. Mainly in cases where there is an aseptic encapsulation of the retained surgical sponge, the patient will remain asymptomatic for many years and the diagnosis made be more difficult. In most cases a textiloma is easily diagnosed on a conventional plain X-ray or on CT scan, due to the pathognomonic presence of marking filaments within it and/or on CT the presence of calcifications in the capsule and/or air in the mass as typically described in the literature due to air trapping. Unfortunately, it is only since the last decade that these marking filaments are used in operative compresses. Moreover, it is less likely to be used in underdeveloped country. As a consequence, not all textilomas will appear with marking filaments and the diagnosis several years postoperative may be very difficult. Typically, on MRI a textiloma, in a chronic setting, shows a thick capsule that has sharp delineations and where the capsule has a heterogeneous hyperintense signal on T2WI while it is mostly hypointense on T1WI due to its granulomatous and fibrotic tissue. After intravenous injection of contrast agent only the periphery capsule will enhance. Obviously, depending on the chemical content of the textiloma, it can have a varying intensity on mainly the T1WI (1).

Differential diagnosis of textiloma can be made with a postoperative hematoma or abscess, a cystic degeneration of a leiomyoma showing a hyperintense signal on T2WI due to the cystisation of the leiomyoma, a pseudo cystic pelvic tumour or an atypical dermoid cyst. In our case, a dermoid was excluded because of its extra-adnexial localisation and the absence of fatty tissue inside the lesion, which can be seen on the T1WI sequence with fat suppression.

The pitfall in our case was the absence of the marking filaments and the presence of multiple uterine leiomyomas. The diagnosis of a textiloma should be included in the differential diagnosis of any atypical mass in the pelvis when there is a previous history of surgery, even when the typical marking filaments are absent.

Reference

1. O'Connor A.R., Coakley F.V., Meng M.V., Eberhardt S.C.: Imaging of retained surgical sponges in the abdomen and pelvis. *AJR*, 2003, 180: 481-489.

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