Pelvic lipomatosis complicating ovarian cyst removal: a case report

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Summary

Pelvic lipomatosis consists of an abdominal capsulated mass containing lipidic tissue, generally with remarkable dimensions, responsible for urinary tract disturbances. Here we describe the first case to our knowledge of accidental intraoperative diagnosis associated to an ovarian cyst in absence of objective symptoms and signs.

Key word: Pelvic lipomatosis; Ovarian cyst; Urinary symptoms.

Introduction

The presence of a capsulated mass containing exclusively adipose tissue in the extraperitoneal space is classifiable as pelvic lipomatosis. It was described for the first time near the end of the '50s as a rare condition characterized by a fatty benign proliferation, commonly in the perivesical or perirectal space. It typically interests black men of average age with excessive bulk.

The mass can be asymptomatic or associated with moderate bladder obstruction or dysuria. Sometimes ureterectasia, hydronephrosis and hypertension are already present. Moreover intestinal obstruction and pelvic vessel compression are also associated.

The etiopathogenesis of pelvic lipomatosis is unknown: it can be an idiopathic condition or due to excessive exposure to steroid hormones.

At ultrasound it appears as an echogenic tissue that compresses the bladder. CT and MR confirm the diagnosis, clearly showing the fatty nature of the perivesical tissue. Urography shows the movement and compression of the bladder with deviated ureters; in advanced stages hydroureteronephrosis may be found. Double contrast opaque enema shows – in cases with perirectal localization – stretching and stricture of the rectum sigma, and obstruction in severe cases. Treatment consists of surgical removal.

A case of pelvic lipomatosis found during operative laparoscopy for adnexal pathology is described.

Case Report

A 40-year-old woman, 160 cm in height and weighing 58 kg, was referred to the outpatient clinic of our department reporting pain in the left iliac area of one week's duration and menometrorrhagia for two months.

The anamnesis showed two spontaneous deliveries in 1994 and 1996, and one operative laparoscopy in 1997 for endometriotic cyst removal in the right ovary.

During the intervention the presence of a vesical mass was seen but not removed because of the small size (it was as large as a walnut).

The clinical history of the patient was not suggestive of urinary tract disturbances nor other relevant pathologies.

Her arterial blood pressure was 110/70, the abdominal wall was tender, and no mass was palpable.

At vaginal exploration the uterus was antiversoflex and mobile with normal dimensions. The right adnexa was palpable because of the presence of a floating, painful, soft mass. The left adnexa did not show any pathology.

Transvaginal ultrasound showed a cystic mass in the right ovary, 9 x 8 cm in diameter, with clear edges and transonic content.

Serum tumoral markers were negative. Operative laparoscopy was scheduled.

At laparoscopy, in addition to the ovarian cyst, a large extraperitoneal mass was observed in continuity with the parietal abdominal peritoneum and vescical visceral peritoneum. This mass was located in a medial place hiding the uterus, but not adhering to surrounding organs. It looked like a sigmoidal ansa adhering to the bladder cupola, both for the aspect and the color. We observed a left ovarian cyst adhering to the posterior large ligament wall and to the back of the uterus with consequent full occlusion of the Douglas pouch.

Due to the uncertain nature of the mass, we decided to perform a laparotomy. At laparotomy we confirmed the presence of a yellowish neoformation, like visceral peritoneum-covered sigma, in continuity with the vesical peritoneum, as parietal peritoneum near the Retzius penetrating the abdomen and constituting a "cul de sac". The mass, approximately 15 cm in diameter and 3 cm in thickness, was completely floating in the peritoneal cavity but adhering for 5 cm in correspondence with the bladder cupola.

Left salpingo-oophorectomy was first performed. Then the perivesical mass was removed after lysis by *digitoclasia* of the adhesions along with the bladder and ligature of the principal vessels feeding the mass.

The postoperative course was normal. The patient was discharged on the fourth day in optimal clinical condition. Histological examination showed a capsulated lipoma, while the ovarian cyst turned out to be a serous cystoma. Histological findings are shown in Figures 1 and 2.

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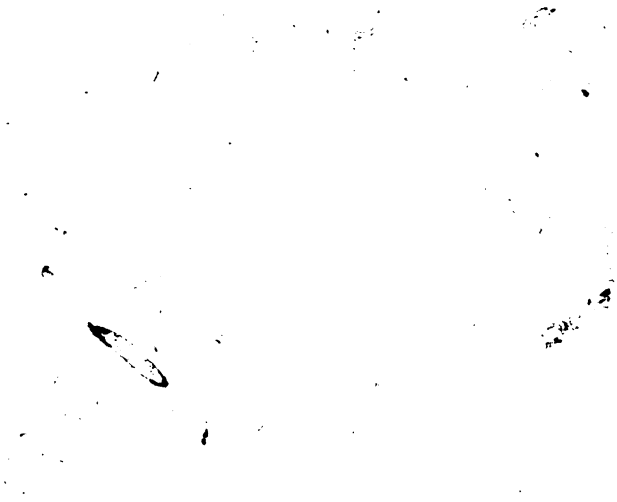

Figure 1. — Mature fat cells and some congested vessels (H&E x 40).

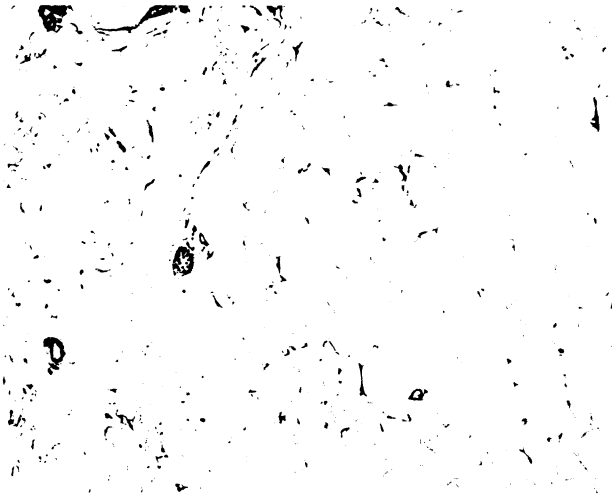

Figure 2. — Normal adipose tissue with rare soft fibrous shoots (H&E x 100).

Discussion

Pelvic lipomatosis is a very rare condition which is poorly documented in the literature. To our knowledge, this is the first case describing lipomatosis associated to an ovarian cyst, therefore confirming a possible correlation between exposure to steroid hormones and pelvic lipomatosis.

The probable presence of the mass seen five years before during operative laparoscopy is meaningful because it suggests very quick growth, and it is amazing the patient did not report any symptoms due to vesical compression.

Finding a yellow mass like a sigma adhering to the bladder requires caution to avoid surgical damage to these organs.

Conclusion

It is remarkable that even if most lipomas are benign and easily diagnosed, the identification of very differentiated liposarcomas and atypical lipomas can be a challenge for pathologists. Benign and malignant lipomas can also cause diagnostic doubts and must be identified in order to avoid inadequate therapy.

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