

A giant extra-uterine fibroma originating from an utero-ovarian ligament initially diagnosed as an ovarian tumour

Over tümörü olarak öntanısı konulan utero-ovaryen ligamentten kaynaklanan dev ekstra-uterin fibrom

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ABSTRACT

A 44-year-old virgin with abdominal mass and anemia was admitted to our hospital. The patient complained of constipation and a palpable mass in the abdomen for about 4 years. On transabdominal ultrasonography, a giant, complex, solid, lobulated mass 152x142x81mm in size was observed. Exploratory laparotomy was performed. There was a giant, multiple lobulated irregular-shaped solid mass occupying the whole abdomen, reaching the xiphoid and infiltrating the omentum. The size of the mass arising from the left utero-ovarian ligament was approximately 30x15cm. The histopathologic report confirmed the diagnosis of leiomyoma with myxoid degeneration.

Keywords: Fibroma, Leiomyoma, Ovarian mass, Adnexial tumor

ÖZET

Kırkdört yaşında abdominal kitle ve anemisi olan kadın hastaneye başvurdu. Kadının 4 yıldır kabızlık ve karında palpe edilen kitle şikayeti vardı. Abdominal ultrasonografide 152x142x81mm büyüklüğünde kompleks, solid lobule yapıda kitle izlendi. Laparotomi planlandı. Operasyonda ksifoide kadar uzanan dev, multi-lobule, düzensiz sınırları olan sert kitle görüldü. Kitlenin büyüklüğü yaklaşık 30x15cm idi ve sol utero-ovaryen ligamentten kaynaklanıyordu. Patoloji raporu miksoid degenerasyon gösteren fibrom olarak geldi.

Anahtar Kelimeler: Fibrom, Leiomyom, Ovaryen kitle, Adneksial tümör

Introduction

Leiomyomas are benign smooth muscle neoplasms that typically originate from the myometrium. Their incidence among women is generally cited as 20-25% , but has been shown to be as high as 70-80% in studies using histologic or sonographic examination [1,2]. Extra-uterine fibromas are not as common as uterine fibroids. They may arise in the broad ligament or at other sites where smooth muscle exists. The real incidence of extra-uterine ligament is not well known. [3]. Among the extrauterine fibromas, broad ligament fibroids are the most common [4] although overall incidences are rare. We present a case of a virgin who had a 30 x 15 cm fibroma arising from the left utero-ovarian ligament. This was removed and the pathology confirmed leiomyoma with myxoid degeneration. To our knowledge, this is the first case reported as an utero-ovarian fibroma in the published English literature.

Case Report

A 44-year-old virgin who had abdominal mass and anemia was admitted to our hospital. The patient had complaints of constipation and a palpable mass in the abdomen for about 4 years. There was no abdominal pain, dysuria or dysmenorrhea. Her menstrual cycle was regular. She did not have any medical, surgical or family history of any malignancy.

Her vital signs were normal and systemic examination was normal as well. On abdominal examination; a solid, firm, irregularly bordered, semi-fixed, non-tender mass reaching up to the level of the xiphoid, was palpated. Speculum examination revealed a normal cervix and vagina. On vaginal examination; the normal size uterus was anteverted, non-tender and semi-mobile.

Her laboratory tests were within normal range. The serum CA-125 level was 106.8 U/ml. On transabdominal ultrasonography, a giant, complex, solid, lobulated mass 152x142x81mm in size was observed. The mass arose from the left adnexial area and extended to the xiphoid, filling the abdominal cavity. There was minimal free fluid in the pouch of the Douglas. Magnetic resonance imaging (MRI) revealed a huge mass arising from the hypogastric area with a maximum diameter of 16 cm.

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Exploratory laparotomy was performed. Approximately 300 cc of ascites fluid was drained. There was a giant, multiple lobulated irregularly-shaped solid mass occupying the whole abdomen reaching the xiphoid and infiltrating the omentum. The size of the mass arising from left utero-ovarian ligament was approximately 30x15cm (Figure). A subserous leiomyoma of 5cm in diameter on the uterine fundus was also observed. The bilateral tubes and ovaries were normal. Myomectomy and partial omentectomy was performed. The mass and peritoneal fluid were sent to frozen pathology. Peritoneal washing showed no malignant cells and the frozen section of the mass was leiomyoma. The postoperative period was uneventful and the patient was discharged on the postoperative 2nd day. The histopathologic report confirmed the diagnosis of leiomyoma with myxoid degeneration.

Discussion

Uterine leiomyomas affect 20%–25% of women older than 35 years. Extra-uterine leiomyomas are rare, and they present a greater diagnostic challenge. These histologically benign tumors, which originate from smooth muscle cells, usually arise in the genitourinary tract (in the vulva, ovaries, urethra, and urinary bladder) but may arise in nearly any anatomic site. In addition, unusual growth patterns may be seen, including benign metastasizing leiomyoma, disseminated peritoneal leiomyomatosis, intravenous leiomyomatosis, parasitic leiomyoma, and retroperitoneal growth. In the presence of such a pattern, a synchronous uterine leiomyoma or a previous hysterectomy for removal of a primary uterine tumor may be indicative of the diagnosis [5].

Non-malignant conditions which may have elevated serum CA125 levels are benign ovarian tumour (eg. Meigs' syndrome), endometriosis, pelvic inflammatory disease/salpingitis, pregnancy and menstruation, leiomyoma, ascites (eg. liver disease (cirrhosis) and renal failure, diverticulosis, pleural and pericardial disease, pancreatitis and heart failure. Ascites is a component of Meigs' syndrome where the pathophysiology of ascites in Meigs' syndrome is speculative. It is suggested that irritation of the peritoneal surfaces by a hard, solid ovarian tumor could stimulate the production of peritoneal fluid.

Among the extrauterine fibroids, broad ligament fibroids are the most common [4], although overall incidence is rare [6]. Also there were many cases reporting fibromas arising from round ligament [7,8]. To our knowledge, this is the first case report describing a fibroma arising from a utero-ovarian ligament in the published English literature.

Fibroids arising from ligaments can reach a giant size and fill the pelvis so that they can mimic ovarian malignancy and serious diagnostic errors may result [5,9]. In this case, the physical examination and imaging findings were consistent with ovarian malignancy.

Sonography is initially performed to define pelvic anatomy. The sonographic appearances of leiomyomas vary from hypo- to hyperechoic, depending on the ratio of smooth muscle to connective tissue and whether there is degeneration. Likewise, in our case, the sonography revealed a mass with millimetric calcifications with hypo and hyperechogenic areas. Cystic or myxoid degeneration typically fills the leiomyoma with multiple, smooth-walled, round, irregularly-sized hypoechoic areas. This



Figure. Mass originating from the left utero-ovarian ligament

necessitates a differential diagnosis from a malignant ovarian tumor and prompts an exploratory laparotomy, which was performed in our case.

Fibroids should always be kept in mind during the differential diagnosis of any pelvic mass. Pre-operative planning should be made accordingly, having in mind that the mass may be of any type of malignancy.

Declaration of Interest

The authors report no conflicts of interest

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