

Large Subserosal Uterine Myomas Showing Cystic Degeneration Should Be Considered in the Differential Diagnosis of Adnexal Masses: Case Report

KİSTİK DEJENERASYON GÖSTEREN BÜYÜK SUBSERÖZ MİYOMLAR ADNEKSİYAL KİTLELERİN AYIRICI TANISINDA UNUTULMAMALIDIR

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Abstract

Leiomyomas are common tumors that usually have a typical ultra sonographic appearance. However, if cystic degeneration occurred, sonographic findings may be completely uncharacteristic.

Ultrasonography in a 41 year-old woman presenting with abdominal distension, depicted a huge well-defined, multi-cystic pelvic mass with some solid regions at the margins. Laparotomy for suspected ovarian tumor revealed a subserosal pedunculated myoma measuring approximately 30x30 cm in diameter. Both ovaries appeared normal. The patient underwent a myomectomy. Pathological examination showed leiomyoma with extensive cystic degeneration.

To the best of our knowledge, this case represents the largest subserosal myoma undergoing cystic degeneration reported so far. Uterine leiomyomas with extensive cystic degeneration should be considered in differential diagnosis of multilocular cystic adnexal masses.

Key Words: Myoma, leiomyoma, pelvic neoplasm, ovarian cyst, adnexa uteri

Özet

Leiomyomlar sık görülen ve genelde tipik bir ultrasonografik görünümüne sahip olan tümörlerdir. Bununla birlikte kistik dejenerasyon meydana gelmesi halinde sonografik bulgular tamamen nonkarakteristik hal alabilir.

Karın şişliği şikayeti ile başvuran 41 yaşındaki bir kadında yapılan abdominal ultrasonografi ile düzgün sınırlı, multikistik yapıda kenarlarında solid alanlar içeren dev bir pelvik kitle izlendi. Over tümörü ön tanısı ile opere edilen hastada 30x30 cm çapında saplı subseröz miyom saptandı. Her iki over normal görünümdeydi. Hastaya miyomektomi yapıldı. Patolojik inceleme kitlenin ileri derecede kistik dejenerasyon gösteren miyom olduğunu gösterdi.

Bildiğimiz kadarıyla bu vaka şimdiye kadar kistik dejenerasyon gösteren literatürdeki en büyük subseröz miyomdur. İleri derecede kistik dejenerasyon gösteren miyomlar özellikle multiloküler kistik yapıdaki adneksiyal kitlelerin ayırıcı tanısında akılda tutulmalıdır.

Anahtar Kelimeler: Miyom, leiomyom, pelvik neoplasm, ovarian kist, adneksa uteri

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Leiomyomas are benign tumors of the uterine smooth muscle, believed to originate from the proliferation of single myometrial cells. Constituting the most common pelvic tumor in

women of reproductive age, the prevalence of clinically relevant leiomyomas approximates 20% to 50%.¹ About 4% of leiomyomas undergo cystic degeneration, which can convert a solid myoma into a pure cystic mass. In such a case, those, which are subserosal and pedunculated can mimic an adnexal mass.²⁻⁶ As both of these conditions may present with overlapping clinical and laboratory findings, it may be difficult to make a definitive diagnosis by noninvasive means. Therefore, almost all cases reported so far have been diagnosed during surgery.

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Here we provide another case, which to the best of our knowledge represents the largest subserosal myoma undergoing cystic degeneration reported in the English speaking literature yet.

Case

A 41-year-old, gravida 3, para 3 premenopausal woman admitted to our clinic, complaining about abdominal distension during the last three months. Her past medical, gynecologic, and surgical histories were unremarkable. She had a regular menstrual cycle history and had three vaginal births.

Her physical examination revealed a huge well-defined, immobile pelvic mass, which filled the whole pelvis and abdomen and extended up to the xiphoid. The sonographic appearance of the tumor was predominantly multi-cystic with some solid regions at the margins. There was also minimal intra-abdominal fluid located around the tumor. Anatomic planes between the tumor and uterus could not be clearly delineated, as the uterus was depressed and displaced by the tumor. The left ovary appeared normal on vaginal ultrasonography, but the right ovary could not be visualized. Routine serum biochemistry, hematological evaluation, cervical cytology and tumor markers (Ca-125: 18.1 IU/mL, Ca-19.9: 6.1 IU/mL, Ca-15.3: 2.9 IU/mL and alpha-fetoprotein: 0.9 IU/mL) were all within normal limits.

With a presumptive diagnosis of ovarian neoplasm, the patient underwent an exploratory laparotomy. A subserosal pedunculated myoma, measuring approximately 30x30 cm in diameter was found. The myoma originated from the posterior surface of the uterine fundus and showed extensive cystic degeneration. Both ovaries and fallopian tubes as well as other intra-abdominal organs appeared normal on inspection (Figure 1). The patient underwent a formal myomectomy. Post-operative recovery was uneventful and the patient was discharged on the sixth post-operative day. Histopathological examination of the mass revealed a leiomyoma with extensive cystic degeneration.

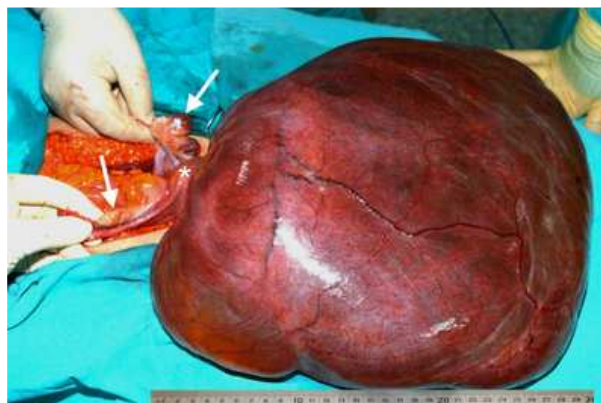


Figure 1. Intra-operative finding of a huge subserosal leiomyoma with extensive cystic degeneration. Note that the tumor is connected to the uterine fundus (asterisk) with a tiny peduncle. Both adnexa looked apparently normal (arrows).

Discussion

Depending on the size and location, leiomyomas can cause excessive menstrual bleeding, dysmenorrhea, pelvic pain and infertility, but most of them are asymptomatic. Degenerative changes do occur in approximately two-thirds of all leiomyomas. Although rapid enlargement can occur during such a process, most of these degenerations are benign. Cystic degeneration results from coalescence of hyalinized areas with liquefaction. This may change the consistency of the tumor from firm to soft. Sometimes the cystic degeneration is so great that the leiomyoma becomes a mere shell and is truly a cystic tumor. Although, the typical appearance of leiomyomas is easily recognized on imaging, an atypical appearance, which follows such degenerative changes, can cause confusion in diagnosis. In the literature we found 5 cases of large subserosal leiomyomas showing extensive cystic degeneration.²⁻⁶ All those cases were diagnosed as a cystic adnexal tumor on ultrasonography. Although 3 cases also provided computed tomographic findings, these added no additional information to the final preoperative diagnosis.⁴⁻⁶

The clinical pictures of a large cystic degenerated leiomyomas can easily be mistaken for clinical presentation of ovarian neoplasms. Abdominal distention together with a large and fixed pelvic mass on physical examination and ultrasonogra-

phy, detection of solid areas and free fluid in the abdomen contributed to the diagnostic confusion in the present case. However, patients with ovarian neoplasms often also have clinical manifestation of malignant disease such as weight loss, anemia, poor appetite, and metastasis symptoms. Serum cancer antigen CA-125 may be mildly elevated in uterine leiomyomas but is generally associated with ovarian carcinoma. In our case, serum CA-125 as well as the other tumor markers was within normal limits, but it should be emphasized that a normal CA-125 level can be found in up to 20% of women with late stage ovarian carcinoma.⁷ Additionally, leiomyomas arising from extragenital organs, such as gastrointestinal system and renal system, may also undergo cystic degeneration and should be included in the differential diagnosis.⁸

Accurate preoperative diagnosis of a pedunculated subserosal tumor is possible if the vascular stalk and/or both normal appearing ovaries can be depicted. The former might be identified with color Doppler ultrasonography, which should focus on the uterus-tumor interface. However, as we did not consider a myoma of such a huge size undergoing cystic degeneration, Doppler evaluation was omitted preoperatively. Exclusion of an ovarian origin can be made on ultrasonography when normal ovaries are demonstrated separately. On the other hand, as in the present case it is not always possible to identify both ovaries on vaginal ultrasonography, particularly if they are displaced by a very huge pelvic mass.

The predominantly cystic nature of the lesion led to the presumptive diagnosis of a primary ovarian tumor. The large size of the lesion and multi-

locularity are typical features of an ovarian tumor. Moreover, suspicion of malignancy was further raised due to a solid peripheral component as well as abdominal free fluid on ultrasonography. However, at pathological examination, the mass proved to be a large pedunculated leiomyoma originating from the uterus and showing extensive cystic degeneration.

We conclude that subserosal uterine leiomyomas with extensive cystic degeneration should be considered in the differential diagnosis of multilocular and predominantly cystic adnexal masses.

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