Vaginal Leiomyoma Mimicking Cystocele in a Hysterectomized Patient: Case Report

Histerektomize Olguda Sistoseli Taklit Eden Vajinal Leiomyoma

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ABSTRACT Leiomyomas are the most common tumors of the uterus. On the other hand, vaginal leiomyomas are rather rare encountered tumors. Vaginal leiomyomas, may be asymptomatic or depending on their occurrence site may present with various complaints such as; vaginal bleeding, dyspareunia, suprapubic pain, frequent urination, dysuria and bulge. Vaginal leiomyomas may be preoperatively misdiagnosed as cervical fibroid, in addition they may be confused with various benign conditions such as cystocele, vaginal cyst and urethral pathology. In this paper, we aimed to present a case of vaginal leiomyoma mimicking cystocele in a hysterecomized 46-years-old woman admitted to the outpatient department with uncomfortable bulge in the vagina.

Key Words: Leiomyoma; cystocele

ÖZET Leiomiyomlar uterusun en sık görülen tümörleridir. Vajinal leiomiyomalar ise, oldukça nadir görülen tümörlerdir. Vajinal leiomiyomlar, asemptomatik olabildikleri gibi yerleşim yerine bağlı olarak vajinal kanama, disparoni, suprapubik ağrı, sık idrara çıkma, dizüri ve şişlik gibi farklı klinik şikayetler ile karşımıza çıkabilirler. Vajinal leiomiyomlar, preoperatif dönemde servikal fibroid olarak yanlış tanı alabilirler ve sistosel, vajinal kist ve üretral patolojiler gibi değişik benign durumlar ile karışabilirler. Bu yazıda, vajende rahatsızlık veren şişlik şikayeti ile kliniğimize başvuran 46 yaşında histerektomize bir kadında sistoseli taklit eden vajinal leiomiyom olgusunu sunmayı amaçladık.

Anahtar Kelimeler: Leiyomiyom; sistosel

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Vaginal leiomyomas are rare and there are only about 300 reported cases since the first described by Denys de Leyden in 1773.[1,2] Bennett and Ehrlich found nine cases in 50000 surgical specimens and only one in 15 000 autopsies which examined at Johns Hopkins Hospital.[3,4] Etiology of the vaginal leiomyoma is unknown. However, some authors reported that it could be due to residual embryonic blood vessel tissues and smooth muscle fibres.[1] Vaginal leiomyomas may occur anywhere within the vagina but usually arise from the anterior vaginal wall presenting as a mass or urinary tract pressure symptoms and they are usually diagnosed during vaginal examination.[5-7] Vaginal leiomyomas can have variable clinical presentations that can cause difficulty in preoperative diagnosis.[3,8] We report a case of anterior vaginal wall leiomyoma indenting into the bladder

wall and presenting as a vaginal bulge that made us misdiagnose as cystocele during inspection.

CASE REPORT

A 46-year-old woman presented to the outpatient department with complaints of an uncomfortable bulge in the vagina especially during coughing, dyspareunia, urgency and frequency of micturation. She had undergone hysterectomy without oopherectomy 3 years previously due to uterine leiomyoma and abnormal vaginal bleeding. On pelvic examination a well-supported vaginal vault and an anterior vaginal wall mass, resembling a cystocele which was bulging from the vagina during Valsalva maneuver was noted (Figure 1). First we thought that we faced a cystocele case during inspection. In contrast to genuine cystocele, repositioning attempt of the mass failed and caused pain; giving the idea of tumor mass instead of cystocele. The mass was firm, smooth, non-tender, nonfluctuant, mobile and with no associated discharge. Urinalysis and urodynamic findings were unremarkable. In order to reveal the relationship between the mass and the bladder, transvaginal ultrasonography was performed with semi-full bladder, and this revealed 3 cm solid mass with mixed echogenic texture (Figure 2). Because the mass was indenting the anterior wall of the bladder, patient was informed and consented for the possibility of bladder injury. The tumor was surgically removed by vaginal approach without any complication and sent for histopathological examination with intraoperative diagnosis of vaginal leiomyoma. (Figure 3a,3b). The tumor was grossly seen to be 3 centimeters in size and with a whitish elastic appearance (Figure 4). Microscopic examination of the tumor revealed a well circumscribed leiomyoma consisting of smooth muscle cells underlying the squamous epithelium (Figure 5).

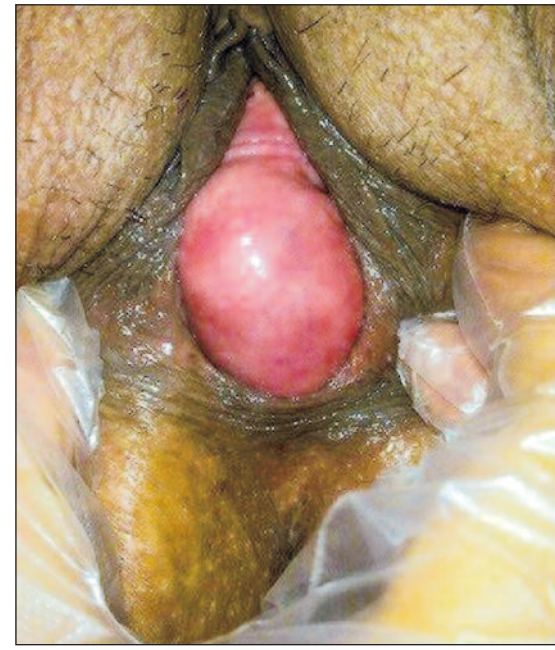

FIGURE 1: Anterior vaginal wall leiomyoma, resembling a cystocele which was bulging from the vagina during Valsalva maneuver.
(See color figure at
http://www.turkiyeklinikleri.com/journal/journal-of-medical-research-case-reports/1300-0284/)

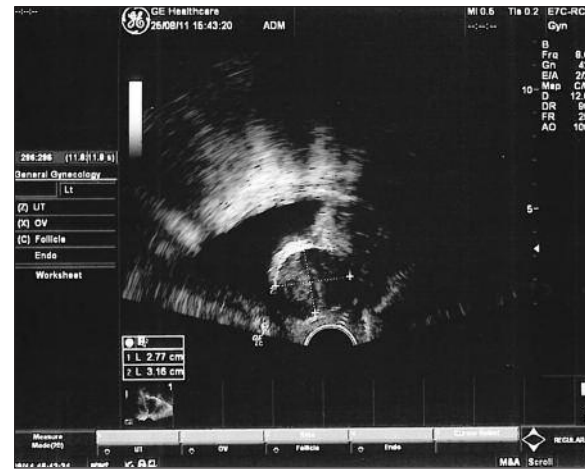

FIGURE 2: Transvaginal ultrasonography which showed a three-centimeter mixed echogenic solid mass was performed with a semi-full bladder in order to show indentation of the leiomyoma into the urinary bladder.

DISCUSSION

Vaginal occurence of the leiomyoma is very rare. Leiomyoma of the vagina occurs most frequently between the ages of 35 and 50.[1] The majority of these tumors are localized, non tender and mobile masses of cystic, semi cystic or solid consistency due to degenerative changes.[2] They are usually solitary and vary from 0.5-15 cm in diameter.[4] Although they usually arise from the anterior vaginal wall as a single mass, sometimes they can be detected in multiple character and on the other sites of the vagina.[9,10] Vaginal leiomyomas are usually in

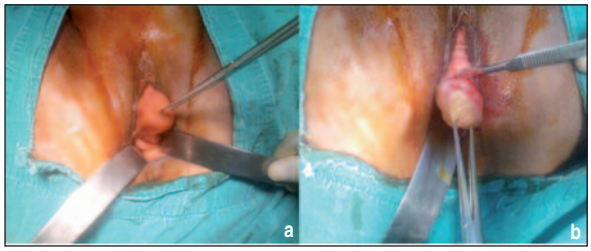

FIGURE 3a,b: View of the leiomyoma during excision procedure.
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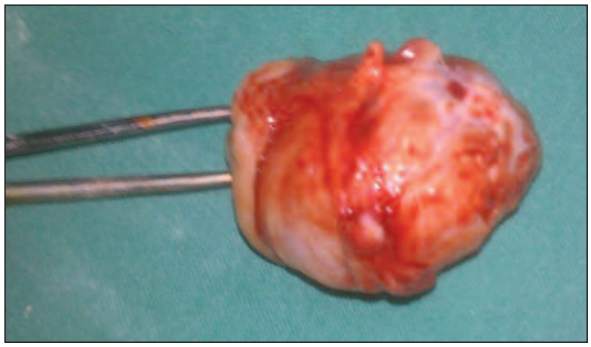

FIGURE 4: The tumor was grossly seen to be 3 centimeters in size and with a whitish elastic appearence.
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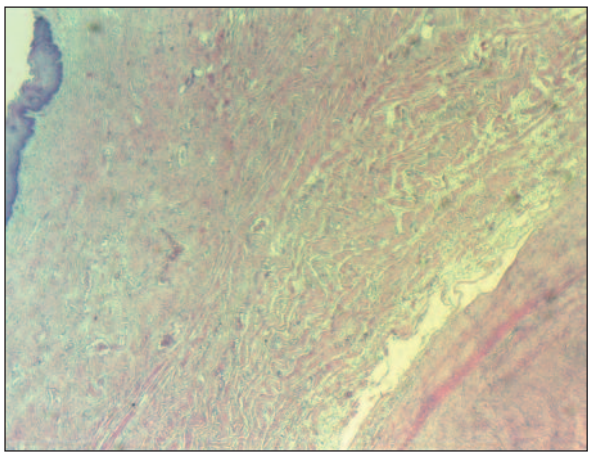

FIGURE 5: Microscopic examination of the tumor revealed a well circumscribed leiomyoma consisting of smooth muscle cells underlying the squamous epithelium, (HEX100).
(See color figure at
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benign condition but rarely they may transform into leiomyosarcomas.[11] They may be asymptomatic or presented with vaginal bleeding, dyspareunia, suprapubic pain, frequency of micturation, dysuria or bulging depending on occurrence site.[3,8] Vaginal leiomyomas may be preoperatively misdiagnosed as cervical fibroid, in addition they may be confused with various benign conditions such as polyps, endometriosis, cystocele, vaginal cyst and urethral pathology, as well as malignant vaginal tumours and rarely metastases.[1]

Vaginal leiomyomas are estrogen-dependent tumors. They can grow rapidly during pregnancy and regress after menopause.[5] A few number of vaginal leiomyoma cases encountered during pregnancy were reported. These tumours may cause difficulty in labour and delivery, resulting dysctocia and caesarean section. Therefore, tumoural excision between the 16th and 32nd weeks of pregnancy, seems to be an appropriate treatment of choice.[1]

Indentation of leiomyoma from the vaginal wall into the urinary bladder has recently been reported in the literature.[12] Pressure of the myoma on the urinary bladder wall causes decrease in bladder capacity eventually urgency and frequency. Transvaginal ultrasonography was performed with a semi-full bladder in order to reveal relation between the bladder and the mass. This may be helpful during surgery. In cases with vaginal fibroid, surgical excision may be difficult technically and also may cause some complication such as bladder injury. Although magnetic resonance imaging is more reassuring to detect soft tissue structures, vaginal ultrasound has some advantages including taking less time, being less expensive and more comfortable.[13] The variable patterns of echogenicity of fibroids also add to diagnostic confusion. To date, only isolated examples of false-negative ultrasonographic diagnosis of fibroids have been reported but there is no report of misdiagnosis specifically on vaginal leiomyomas.[14] Attention to good sonographic technique will improve diagnostic accuracy and thereby improve patient care. Thus, ultrasonographic imaging is still reliable to detect vaginal leiomyomas.

In conclusion, vaginal leiomyomas may present with a variety of clinical features. Although it

is a rare tumor, in cases complaining of bulging in the vagina, vaginal leiomyoma should be remembered in differential diagnosis. Preoperatively, to anticipate the complexity of surgery procedure, indentation of vaginal myoma into the bladder should be investigated. Vaginal or transperineal sonography with semiful bladder will be helpful in such cases.

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