

## Adenomyomatous polyp causing acute urinary retention in a postmenopausal woman

### *Menapoz sonrası bir kadında akut idrar retansiyonuna neden olan adenomatöz polip*

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#### ABSTRACT

A case of adenomyomatous polyp (AP) causing acute urinary retention in postmenopausal period is presented. A 65-year-old, G8P8 woman admitted to our clinic with the complaint of vaginal bleeding and vaginal mass was identified. During preoperative hospitalization she complained about not able to urinate. Serum urea and creatinine levels increased [66 mg/dL (range= 10-45) and 2,49 mg/dL (range= 0.6-1.3) respectively]. Emergent abdominopelvic tomography showed vaginal mass and overdistended bladder. Mass was removed by vaginal route and abdominal hysterectomy was also performed. Pathologic examination revealed non-malignant AP with massive necrosis. A variety of female reproductive tract diseases can cause urinary obstruction. Treatment choice depends on reproductive expectation of the patient. *J Clin Exp Invest* 2011; 2 (3): 312-314.

**Key words:** Adenomyomatous polyp, acute urinary retention, postmenopause

#### INTRODUCTION

Adenomyomatous polyp (AP) is a rare neoplasm that contains endometrial glands and smooth muscle fascicles originating from uterus. It resembles endometrial polyp and usually appear in premenopausal period. It has benign character and frequently causes abnormal uterine bleeding. In postmenopausal period malignancy risk increases.<sup>1,2</sup> We described a case of postmenopausal AP causing acute urinary retention with mass effect for the first time in the pertinent literature.

#### ÖZET

Postmenapozal dönemde akut üriner retansiyona neden olan adenomyomatoz polip (AP) olgusu sunulmuştur. 65 yaşında G8P8 bayan hasta kliniğimize vaginal kanama şikayeti ile başvurdu ve vajende kitle varlığı saptandı. Preoperatif hazırlık için hospitalize edilen hastanın idrar yapamama şikayeti olduğu öğrenildi. Serum üre ve kreatinin değerlerinin yüksek olduğu saptandı [66 mg/dL (normal aralık= 10-45) ve 2,49 mg/dL (normal aralık = 0.6-1.3) sırasıyla]. Acil abdominopelvik tomografide vajinal kitle ve distandü mesane izlendi. Kitle vajinal yoldan çıkartıldı ve abdominal histerektomi uygulandı. Patolojik incelemede malign olmayan ve yoğun nekroz alanları içeren AP olduğu saptandı. Kadın genital sistem patolojilerinin bazıları üriner retansiyona neden olabilirler. Tedavi seçimi hastanın fertilitate beklentisine bağlıdır. *Klin Deney Ar Derg* 2011; 2 (3): 312-314.

**Anahtar kelimeler:** Adenomyomatoz polip, akut üriner retansiyon, postmenapoz

#### CASE

A 65-years-old, G8P8 woman admitted to our clinic with the complaint of vaginal bleeding. Her personal history revealed 8 years of postmenopausal period, irregular vaginal bleeding increased recently, inguinal pain and fell of pelvic fullness especially in last year. She did not received any medication including hormone replacement. External genitalia examination was normal except laterally retracted labia majora. A smooth-surfaced and bright-red coloured soft and mobile huge mass filling vagina is examined. Pelvic ultrasonography revealed vagi-

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nal mass (100 x 80 mm), thin endometrium (4 mm) and normal appearing uterus (62 x 80 mm. ). Her biochemical parameters and tumor markers (Ca-125, AFP, CEA,  $\beta$ -Hcg) were within normal range. During preoperative hospitalization she complained about not able to urinate. Serum urea and creatinine levels increased [66 mg/dL (range= 10-45) and 2,49 mg/dL (range= 0. 6-1. 3) respectively]. Emergent abdominopelvic tomography showed mild dilatation in the collecting system of right kidney (Figure 1, 2). Due to urinary problems her operation was prioritized and mass was removed by vaginal route under general anesthesia. Mass was originating from uterus and vagina were normal in appearance. The mass was brilliant-red in colour with jelly stiffness (12 $\times$ 12 $\times$ 2 cm.). Abdominal hysterectomy was also performed. On postoperative first day, she did well on urination and kidney function restored quickly. Pathologic examination revealed non-malignant AP with massive necrosis. She was discharged after problem-free postoperative five days. Monthly follow-up was normal with improved urinary system confirmed by ultrasonography.



**Figure 1.** The mass located in vagina was seen in sagittal tomography section, anterior to uterus and bladder distension caused by compression of the mass.



**Figure 2.** Transverse view of the mass in vagina.



**Figure 3.** Adenomyomatous polyp, after polypectomy.

## DISCUSSION

APs are defined as endometrial polyps in which the stromal components contain both endometrial tissues and smooth muscle of the uterus. Histologic sections shows polypoid growth with proliferation of benign endometrial glands in stroma exclusively composed of fascicles of benign appearing smooth muscle cells.<sup>3</sup> The lesions often present with abnormal uterine bleeding<sup>2</sup> and frequently seen in premenopausal period.

Although APs are benign tumors, during postmenopausal period, endometrial hyperplasia and endometrial cancer risks are increased.<sup>1</sup> In young, premenopausal women with AP who wish to remain fertile, local resection (polypectomy) with careful postoperative follow-up may be the treatment choice. However, in menopausal women, simple hysterectomy is the appropriate treatment.<sup>1</sup>

When the polypoid and pedunculated structure (submucous pedunculated myoma uteri) is present within the uterine cavity, natural tendency for the uterus to expel it through the endocervical canal is inevitable. Cervix is dilated in time and even large pedunculated submucous myomas can grow gradually into the vagina. Necrosis and infection may develop in the slouched mass as circulation through tiny peduncle is difficult. Patients may have pelvic pain, feel of pressure and heaviness in the pelvis, irregular vaginal bleeding, bloody vaginal discharge and difficulty in urination. Such masses might be reported as leiomyoma commonly.<sup>4</sup> As we presented in our case, a giant adenomyomatous polyp protruded into the vagina through cervical canal. Along with enlargement, it occupied whole vagina and compressed urethra, causing urinary retention. In the pertinent literature this is the first case presenting acute urinary retention caused by AP ([www.pubmed.com](http://www.pubmed.com), search terms: acute urinary retention, adenomyomatous polyp).

A variety of female reproductive tract diseases can cause urinary obstruction. The urethra and/or bladder neck may be compressed through any mass effect with acute urinary retention. When the literature is reviewed, it is observed that such masses are usually reported as leiomyoma.<sup>5</sup> Among pelvic

masses also carcinomas especially vaginal carcinoma may cause urinary retention by mass effect.<sup>6</sup>

Magnetic resonance (MRI) is the best choice of radiological imaging technique in soft tissues. However, because of delay in treatment, we couldn't perform MRI in our case. Emergent abdominopelvic CT revealed the mass in the vagina and also urinary bladder obstruction.

This case presented that a huge AP in the vagina caused urgent urinary retention. This case also represents how a vaginal mass can cause urgent urinary problems. Treatment choice depends on reproductive expectance of the patient.

Conflict of interest statement: We declare that we have no conflict of interest.

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