Diagnosis of Bladder Carcinoma in a Woman Presenting with Postmenopausal Bleeding: Case Report

Postmenopozal Kanama ile Başvuran Bir Kadında Mesane Karsinomu Tanısı

Ali AKDEMİR,^a Burak ZEYBEK,^a Enes TAYLAN,^a Ahmet Mete ERGENOĞLU,^a Ahmet Özgür YENİEL^a

^aDepartment of Gynecology and Obstetrics, Ege University Faculty of Medicine, İzmir

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Yazışma Adresi/*Correspondence:* Enes TAYLAN Ege University Faculty of Medicine, Department of Obstetrics and Gynecology, İzmir, TÜRKİYE/TURKEY enes_taylan@yahoo.com

doi: 10.5336/gynobstet.2013-38614 Copyright © 2015 by Türkiye Klinikleri **ABSTRACT** Although the most common etiology for postmenopausal bleeding is from genital organs, rarely various lesions from adjacent tissues such as urinary tract or distal gastrointestinal tract may cause similar symptomatology that mimics postmenopausal bleeding. We report a case of patient, which was initially evaluated as postmenopausal bleeding through consecutive diagnostic procedures, and finally hysteroscopy and co-existent cystoscopy that revealed in situ bladder carcinoma. When evaluating postmenopausal bleeding especially in elderly women, bladder tumor should be kept in mind while establishing differential diagnosis, and in addition to transvaginal ultrasonography and hysteroscopy, cystoscopy should be performed for further investigation particularly in patients with recurrent postmenopausal bleeding in the absence of gynecological pathology.

Key Words: Urinary bladder neoplasms; uterine hemorrhage; postmenopause

ÖZET Postmenopozal kanamanın etyolojisinde en sık genital organlar sorumlu iken, nadiren üriner ve distal gastrointestinal kaynaklı faktörler genital kaynaklı postmenapozal kanamayı taklit edebilir. Bu olgu sunumunda, ilk olarak postmenopozal kanama nedeniyle tanısal işlemler yapılan ve histeroskopik değerlendirme eşliğinde sistoskopik incelemede in situ mesane karsinomu saptanan bir hasta sunulmuştur. Postmenopozal kanama ile başvuran özellikle ileri yaş hastalarda ayırıcı tanıda mesane kaynaklı tümörler mutlaka akılda bulundurulmalı ve standart tanısal işlemler olan ultrasonografi ve histeroskopiye ek olarak jinekolojik patoloji saptanmadığı takdirde sistoskopi yapılmalıdır.

Anahtar Kelimeler: Mesane tümörleri; uterus kanamaları; postmenopoz

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Provide a solution of the investigation in this situation is to rule out malignancy, because 95% of women with endometrial cancer present with PMB as the sole discomfort.^{5,6} However, it is not vice versa as the prevalence of endometrial carcinoma is varying from 3-10% in women with endometrial atrophy, endometrial polyps and carcino-

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mas, both benign and malign cervical and vaginal pathologies can be considered in genital origins. On the other side, various lesions from adjacent tissues such as urinary tract or distal gastrointestinal tract may cause similar symptomatology through mimicking PMB.

In diagnostic evaluation of PMB, although transvaginal ultrasound (TVS) is the basic and the least invasive technic, there are various procedures such as pipelle biopsy, fractionated dilatation and curettage (D&C) or hysteroscopy that provide pathological specimen. On the other hand, cystoscopy and anorectal visualization should be performed to exclude bladder and anorectal carcinomas unless you diagnose gynecological pathology.

We report a case of in situ bladder carcinoma, which was evaluated as PMB through consecutive diagnostic procedures and finally hysteroscopy and co-existent cystoscopy in gynecology clinic.

CASE REPORT

In our case, a 76-year-old white female, para 2, presented to the clinic with PMB. She had been postmenopausal for 26 years. She had described irregular spotting vaginal bleeding for last two years and had been performed fractionated D&C twice. Both pathological specimens were reported as benign for cervix and endometrium. Clinical examination was unremarkable. Routine blood tests were normal. Microscopic evaluation of urine revealed 8 red blood cells in each field and urinalyses revealed 150 erythrocyte/µL. Urine culture was negative. Internal genital organs were evaluated by TVS. Uterus and ovaries were normal and endometrial thickness was 3.8 mm. At the same time abdominopelvic sonography was performed in order to rule out other possible pathologies and it was reported as normal urinary tract findings with empty bladder and grade 2 fatty liver.

Because of recurrent and persistent PMB, endometrial sampling through diagnostic hysteroscopy was performed. During the hysteroscopic examination of uterine cavity, atrophic endometrium was observed and random sampling was performed (Figure 1). In the same session in



FIGURE 1: Hysteroscopic visualization demonstrating smooth endometrium without intracaviter lesion.

order to elucidate the etiology of recurrent PMB, cystoscopy was performed to observe lower urinary tract for probable pathology. Cystoscopy revealed a mass likely to be bladder tumor, 2 cm in diameter, located on the left ureteral orifice (Figure 2). Subsequently, patient underwent further urological investigation and had been performed complete resection of tumor. In pathological report endometrial and cervical samplings were consistent with the previous benign results, however bladder lesion was reported as low grade, papillary urothelial carcinoma without invasion to the layer of muscularis propria. Subsequent cytological investigation of bladder revealed benign pathology after 3 months of operation.

DISCUSSION

Postmenopausal bleeding is one of the most common reasons for referral to gynecological clinics and nowadays it is suggested that all these patients must be investigated in order to rule out lower genital tract malignancy.^{7,8} In recent years several management strategies that utilize TVS with or without endometrial sampling have been demonstrated. TVS is generally recommended as a first step procedure in evaluation of patients with PMB because of being safe, less invasive, rapid and highly effective. Furthermore, it may help the evaluation of the other pelvic organs additional to internal genital organs.⁹ Many authors suggested that almost 100% accuracy for detection of endometrial cancer by using TVS.¹⁰ While D&C used to be gold



FIGURE 2: Cystoscopic visualization demonstrating irregular papillary lesion in bladder.

standard diagnostic procedure for PMB, several authors on the basis of many well-documented studies considered hysteroscopy as the gold standard investigation because of high quality visualization of focal lesions in uterine cavity.^{11,12}

PMB in most cases has been reported as gynecological origin, nonetheless non-gynecological causes particularly urological pathologies also must be considered. Abdel-fettah et al. aimed to identify the prevalence of urinary bladder tumors in women presenting with PMB through a prospective cohort study.¹³ They investigated all patients with TVS and suspicious cases were performed cystoscopy. As conclusion they reported one benign (%0.37) and two malign (%0.7) cases of bladder tumors among 280 women with PMB.¹³ Datta et al. suggested that ultrasonography might help and prevent delayed diagnosis of bladder tumors with 99% sensitivity and 63% specificity.¹⁴ Against these findings although our patient was evaluated through pelvic ultrasound for urogenital pathology, improper scanning with empty bladder missed the tumor inside the bladder.

Recently, Betsas et al. published a case report including two separate cases of bladder carcinoma

evaluated as postmenopausal vaginal bleeding.¹⁵ Both patients were over 70 years old and had similar complaints as irregular vaginal bleeding (spotting) which occurred during, as well as after, passing urine. Similarly, our patient was 75 years old and during the initial admission and ongoing processes even though her urinalysis included microscopic hematuria, patient's misdirection that her bleeding was unrelated with urination led us disregarding urologic pathologies in first step. Especially in elderly patients history of PMB should be clearly discussed in order to exclude differential diagnosis unless it was observed during the examination. In the report mentioned before, TVS evaluation revealed suspicious bladder tumor in both patients. Our patient also had been assessed by TVS in our gynecology clinic for evaluation of PMB, however, TVS due to empty bladder caused to fail diagnose of the bladder tumor. Because of unusual origins of PMB such as bladder pathologies, observers should also evaluate lower urinary tract with slightly filled bladder.

Yakasai et al. reported 17 cases of endometrial cancer and 3 cases of bladder tumor (malignant transitional cell cancer) in their retrospective analysis of 753 women with PMB.¹⁶ They pointed out that although hematuria is common presenting symptom in bladder tumor, in absence of this symptom TVS can report these lesions as in their cases.

As a result, both gynecologists and urologists should be careful when evaluating postmenopausal urogenital bleeding, especially in elderly women. Bladder tumor should be kept in mind in differential diagnosis of PMB. We recommend hysteroscopy and cystoscopy in addition to TVS for further investigation particularly in patients with recurrent PMB in the absence of gynecological pathology.

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