

METASTATIC MALIGNANT MELANOMA OF FEMALE URETHRA: A CASE REPORT

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ABSTRACT

We report here a rare case of primary malignant melanoma of the female urethra. A 60-year-old female presented at our hospital with a two month history of painful lump right inguinal region, dysuria, poor stream, gross hematuria, intermittent blood spots and a mass at the external urethral meatus. The physical examination revealed a soft, small, peanut-sized lesion through the urethral orifice. The mass was tan colored, non ulcerated, and protruded from the external urethral meatus. It was resected by wide local excision under spinal anesthesia. The histopathological diagnosis was malignant melanoma of the urethra. Computed tomography of the abdomen showed evidence of metastasis to liver. We discuss the clinicopathologic features and treatment of this tumor.

KEYWORDS: Urethra; Melanoma; Metastatic; Tamoxifen.

INTRODUCTION

Primary malignant melanoma of the urethra in females is very rare and is only 0.2% of all malignant melanomas.^[1] Most commonly, it is located at the meatus or in the distal urethra. It was first described in 1896 by Reed, published as case reports.^[2] Different histological variants are: squamous cell carcinoma (60% of cases), transitional cell carcinoma (20%), adenocarcinoma (10%), undifferentiated tumors and sarcomas (8%) and melanoma (2%). It is reported to be more common in women than men with a 3:2 ratio and the average age of presentation is 68 years, ranging from 32 to 80 years.^[3]

Case Presentation

A 60-year-old woman presented with a two months history of painful lump right inguinal region with gross hematuria, intermittent blood spots from urethra and a mass at the external urethral meatus. She was postmenopausal and had no history of postmenopausal bleeding. She also had no history of hypertension, hyperlipidemia, diabetes or pelvic surgery. The pelvic examination revealed a soft, peanut-sized lesion (Figure 1) protruding through the urethral orifice. The mass was tan colored, ulcerated, covered with necrotic tissue and protruded from the external urethral meatus. Contrast abdomino-pelvic computerised tomography (CT) scan (Figure 2 and 3) reveal the presence of multiple metastatic lesions in liver. Excision biopsy of the lesion shows results consistent with malignant melanoma, with vimentin and HMB-45 positive. Patient received palliative radiotherapy to the right inguinal region and

now she is on tamoxifen based hormonal therapy for metastatic malignant melanoma.

Review of Literature

One of the rarest tumors of the female urethra is malignant melanoma and usually originates from the distal urethra. It accounts for 0.2% of all malignant melanomas and 4% of all urethral cancers.^[1] The first case of urethral melanoma was reported by Tyrell and Reed more than 100 years ago.^[4] A few additional cases have been reported since that time. In the Korean literature only five cases of urethral melanoma have been reported, three in women and two in men. It is three times as common in women as in men, like other malignant urethral tumors, and it is more frequent in the Caucasian population. Most commonly seen after the fifth decade but some cases occur in younger patients.^[5] The presenting symptoms include vaginal bleeding, mass, hematuria and dysuria. The size of the lesions may vary from few mm to 6 cm. Up to 20% can be amelanotic, generating differential diagnosis such as transitional cell carcinoma or sarcomapagetoid infiltrations of urothelial carcinomas or even benign lesions.^[6] S-100 protein and HMB-45 are the most frequently used melanocytic markers in clinical practice. Although HMB-45 is quite specific for melanocytic neoplasms, it is less sensitive than S-100 protein for identifying melanoma.^[7]

In our case, as a result of this high sensitivity, the strong immunoreactivity to S-100 protein resulted in a diagnosis of malignant melanoma. Further testing with HMB-45 was conclusively positive and thus, provided a

confirmatory diagnosis. The urethral malignant melanoma has a worse prognosis than a malignant melanoma of the cutaneous origin because of the frequent finding of a vertical growth phase and lymph node metastasis at the time of diagnosis. It tends to metastasize at an early stage to adjacent areas, the regional lymph nodes and occasionally distant sites by the hematogenous route. The optimum treatment for urethral melanomas in women has not yet been defined. The treatment of choice is early extensive excision to control the local disease. The treatment primarily depends on the location of tumor and the clinical stage. The treatment varies from local excision with or without the addition of radiation therapy to extensive surgery, including cystourethrectomy, vaginectomy, vulvectomy, and lymph node dissection.^[8] Local excision, is sufficient for relatively small, superficial, distal urethral tumors. But it may not provide good local control. A more aggressive approach is needed for more proximal and advanced urethral tumors. In the

present case, palliative radiotherapy was given followed by hormonal therapy.

For hormonal treatment, Cocconi et al suggested that tamoxifen should be considered part of the standard therapeutic regimen for melanoma. Although the survival advantage was observed but is in need of confirmatory studies. Some studies suggested a possible synergistic effect of tamoxifen combined with cisplatin-containing regimens in high-risk patients with malignant melanoma.^[9]

Current evidence does not support a large-scale trial to assess the efficacy of tamoxifen. Because the incidence of melanoma is rising worldwide and the prognosis of metastatic disease remains poor with currently available treatment, there is a pressing need for the development of new strategies in the management of this disease.



Fig 1: Malignant melanoma of female urethra



Figure 2: Contrast abdomino-pelvic CT scan

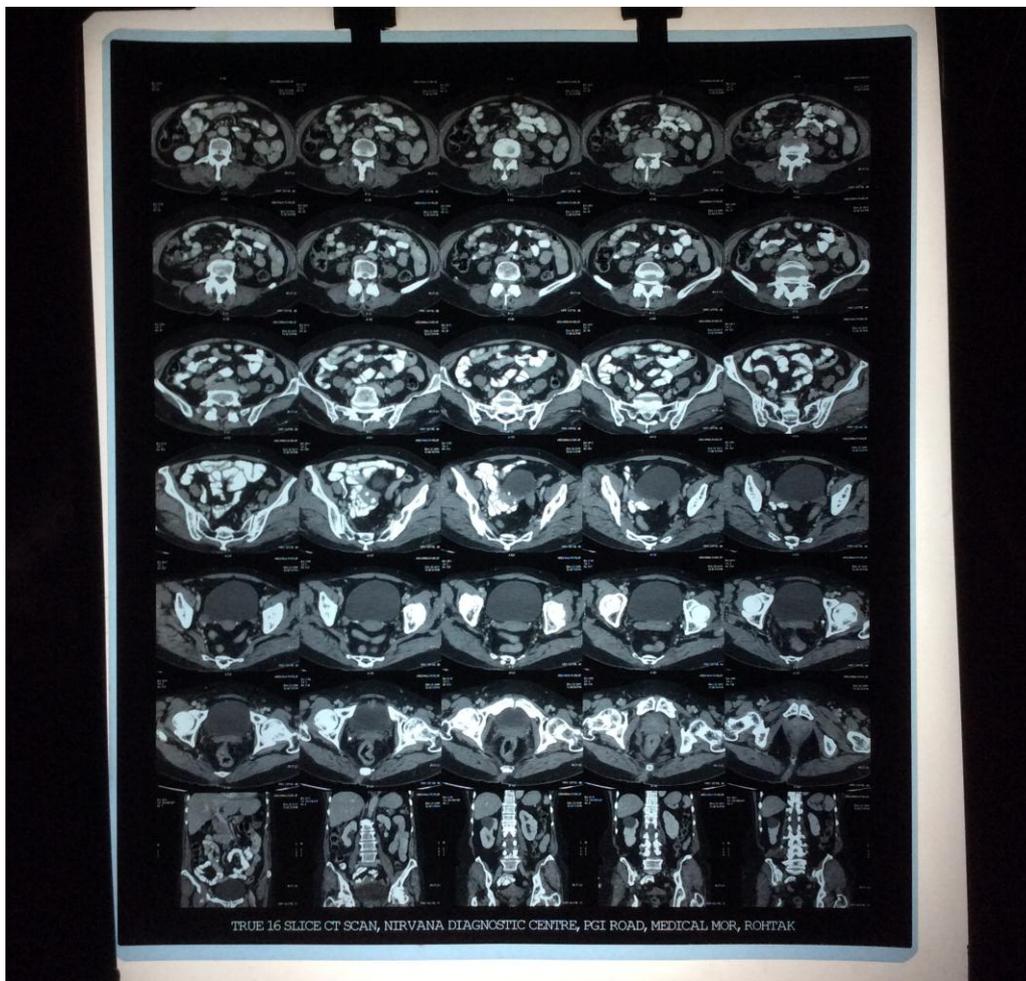


Figure 3: Contrast abdomino-pelvic CT scan.

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