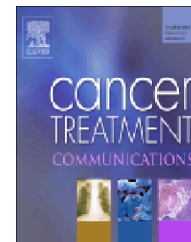




Available online at www.sciencedirect.com

SciVerse ScienceDirect

www.elsevier.com/locate/ctrc



Primary malignant melanoma of the female urethra: A radiologic-pathologic correlation



Dana Amiraian^{a,*}, Joseph Cernigliaro^a, Qihui “Jim” Zhai^b,
Steven Petrou^c

^aDepartment of Radiology, Mayo Clinic, 4500 San Pablo Road South, Jacksonville, FL 32224, United States

^bDepartment of Pathology, Mayo Clinic, 4500 San Pablo Road South, Jacksonville, FL 32224, United States

^cDepartment of Urology, Mayo Clinic, 4500 San Pablo Road South, Jacksonville, FL 32224, United States

Received 31 October 2014; accepted 31 January 2015

KEYWORDS

Malignant melanoma;
Magnetic resonance
imaging (MRI);
Diagnosis;
Surgical planning;
Urethrectomy;
Pathology

Abstract

Introduction: Primary malignant melanoma of the urethra is an extremely rare disease associated with a poor prognosis due to early metastasis and often delayed diagnosis. There is limited literature on this entity, especially with regard to radiologic imaging.

Presentation of case: The case presented is a 67-year-old African American woman with primary urethral melanoma who underwent bladder-sparing surgery based upon pelvic magnetic resonance imaging (MRI) findings.

Discussion: MRI can be used for diagnosis of primary urethral melanoma and evaluation of tumor extent for surgical planning purposes.

Conclusion: Pelvic exenteration is often required for primary urethral melanoma treatment, though bladder conservation surgery may be a viable option in patients without evidence of bladder invasion on MRI.

© 2015 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Introduction

Primary malignant melanoma of the urethra is an extremely rare entity with a poor prognosis due to its early metastasis and often delayed diagnosis. There is limited literature regarding primary urethral melanoma, particularly involving the utility of magnetic resonance imaging (MRI) for diagnosis and surgical planning purposes. A case of primary malignant

melanoma of the urethra is presented. The patient is a 67-year-old African American woman with pathology proven primary urethral melanoma without evidence of metastatic disease, who underwent bladder-sparing surgery based upon pelvic MRI findings. MRI can be integral for both diagnosis and surgical planning in patients with primary urethral melanoma.

2. Case

An otherwise healthy 67-year-old African American woman presented to an outside facility with obstructive voiding

*Corresponding author. Tel.: +1 904 953 7930.

E-mail address: amiraian.dana@mayo.edu (D. Amiraian).

symptoms. She underwent cystoscopy and urethral dilation, during which friable tissue in the posterior urethra was identified and biopsied. Pathologic results were consistent with the diagnosis of urethral melanoma. An outside PET scan was reportedly negative for metastatic disease, and the patient was referred to our institution for further care.

Upon transfer, the physical examination was remarkable for a palpable and partially mobile urethral mass without suprapubic tenderness or lymphadenopathy. Pelvic MRI was performed with and without gadolinium. The MRI demonstrated an extremely well-circumscribed, avidly enhancing tumor centered in the posterior mid-urethral wall measuring 2.3 (right-left) \times 2.0 (anterior-posterior) \times 2.4 (cranial-caudal) cm. The lesion was uniformly isointense on T2, without T1 hyperintensity. There was mass effect posteriorly upon the anterior vaginal wall. No lymphadenopathy or metastasis was identified (Figures 1-4).

Based upon the pelvic MRI findings, the patient underwent a total urethrectomy, bladder augmentation using the right colon, and formation of a continent catheterizable stoma using the terminal ileum. A bilateral pelvic lymph



Figure 1 Round, circumscribed, isointense urethral mass on coronal T2 MRI.

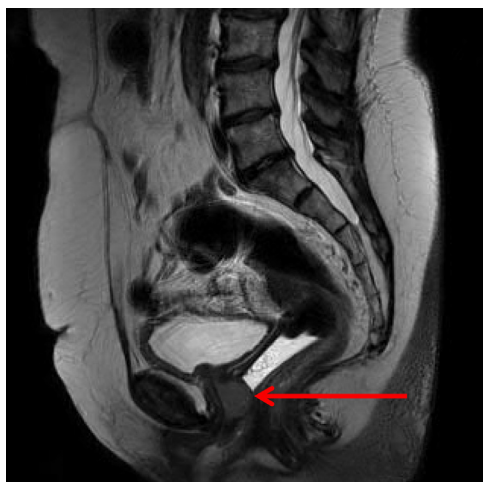


Figure 2 Round, circumscribed, isointense posterior urethral mass with mass effect on the vagina on sagittal T2 MRI.



Figure 3 Urethral mass without hyperintensity on coronal T1 MRI.

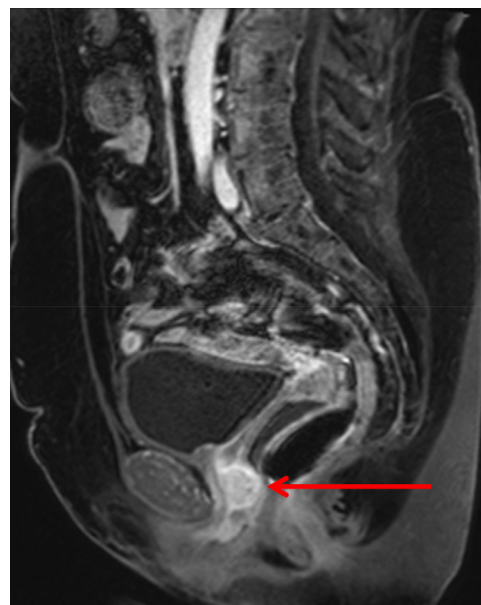


Figure 4 Round, circumscribed, enhancing posterior urethral mass with mass effect on the vagina on sagittal post-contrast fat-saturated MRI.

node dissection was also performed. Surgical pathology revealed both invasive and in situ malignant melanoma of the urethra, with negative resection margins. Frozen sections of the adjacent vaginal mucosa and proximal urethral margin were negative for malignancy. All 20 dissected pelvic lymph nodes were benign. A diagnosis of primary urethral malignant melanoma was made based upon the presence of in situ tumor cells containing melanin pigment. Also, the outside biopsy was positive for S-100, melan-A, and vimentin. BRAF V600 mutation testing was performed and was negative for mutation (Figure 5).

3. Discussion

Primary malignant melanoma of the urethra is an extremely rare entity, comprising less than 1% of all melanomas [1] and

Download English Version:

<https://daneshyari.com/en/article/3979676>

Download Persian Version:

<https://daneshyari.com/article/3979676>

[Daneshyari.com](https://daneshyari.com)