ABSTRACT

Metastatic bladder tumors constitute <5% of all bladder tumors and metastatic malignant melanoma of the urinary bladder is very rare. We present a case report of a metastatic malignant melanoma of the urinary bladder. A 70-year-old woman without any apparent significant clinical history was admitted to the Department of Urology for gross hematuria. Microscopic findings of the transurethral resection specimen revealed fascicles, sheets, and diffuse areas composed of oval and fusiform cells with focal pigmentation. Immunohistochemical analysis revealed that the tumor cells were positive for human melanoma black-45, Melan-A, and S100, and negative for pancytokeratin. Subsequently, we contacted the patient and learned that she was admitted to the Department of Ophthalmology for painless and progressive visual field loss 15 years ago. She had been diagnosed with a primary ocular (uveal) melanoma. A detailed patient history coupled with histological and immunohistochemical findings were necessary to make the final diagnosis of metastatic melanoma.

KEY WORDS: Malignant melanoma, metastasis, urinary bladder

INTRODUCTION

Metastatic malignant melanoma of the urinary bladder has been very rarely reported. We performed a systematic search of Medline and PubMed and found that only 30 cases have been published in the English literature. Herein, we present a case report of a metastatic malignant melanoma of the urinary bladder.

CASE REPORT

A 70-year-old woman was admitted to the Department of Urology for gross hematuria. A computed tomography scan showed a 7 cm × 5 cm, irregular, spiculated, polypoidal mass in the urinary bladder [Figure 1]. The patient underwent cystoscopy and complete transurethral resection (TUR) of the bladder tumor. The total resected specimen weighed 80 g. Histopathological examination of the tumor specimen revealed fascicles, sheets, and diffuse areas composed of oval and fusiform cells with focal pigmentation [Figure 2]. The overlying epithelium was eroded, and there urothelial dysplasia or carcinoma in situ was not observed. Immunohistochemical analysis revealed that tumor cells were positive for human melanoma black-45, Melan-A, and S100, and negative for pancytokeratin [Figures 3-6]. Initially, the patients complete history had not been reported, and we did not know whether the diagnosis indicated a primary or metastatic malignant melanoma of urinary bladder. Subsequently, we contacted the patient and learned that she was admitted to the Department of Ophthalmology for painless and progressive visual field loss 15 years ago. She had been diagnosed with a primary ocular (uveal) melanoma. This had no extraocular extension and was managed with enucleation with curative intent. We then made the diagnosis of a metastatic malignant melanoma of the urinary bladder. The patient was treated with TUR and systemic chemotherapy using the Dartmouth regimen, including carmustine, dacarbazine, and cisplatin. She is disease free after 8 months of follow-up.

DISCUSSION

Metastatic bladder tumors constitute <5% of all bladder tumors. Metastatic malignant melanoma of the urinary bladder is very rare. Through a systematic search of Medline and PubMed, we found that only 30 cases have been published in the English literature [Table 1]. Clinically evident metastatic melanoma of the bladder has
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Figure 1: A computed tomography scan showing a 7 cm × 5 cm, irregular, spiculated, polypoidal mass in the urinary bladder

Figure 2: The tumor composed of fascicles, sheets, and diffuse areas composed of oval to fusiform cells with focal pigmentation (H and E, ×400)

Figure 3: Tumor cells were positive for human melanoma black-45 (×400)

Figure 4: Tumor cells were positive for Melan A (×400)

Figure 5: Tumor cells were positive for S100 (×400)

Figure 6: Tumor cells were negative for pancytokeratin (×400)

been rarely described, and it typically presents as painless, macroscopic hematuria. A subsequent diagnosis is usually made on the basis of the cystoscopic findings and histopathological features combined with a clinical history of previous melanoma.
Metastasis of malignant melanoma may present soon after the diagnosis of the primary lesion or after >15 years. This is only the third reported case in the literature describing a urinary bladder tumor resulting from a primary ocular melanoma that was managed via enucleation. Several treatments have been proposed to deal with metastatic malignant melanoma. TUR, partial cystectomy, radical cystectomy, chemotherapy, and radiation therapy have all been used to treat melanoma of the bladder. Metastatic malignant melanoma has a very poor prognosis, with an overall median survival of 6-7.5 months. Our patient was treated with TUR and systemic chemotherapy using the Dartmouth regimen, including carbustine, dacarbazine, and cisplatin. She is disease free after 8 months of follow-up.

Melanoma of the bladder is typically a secondary recurrence in patients with widespread metastatic melanoma originating from the skin or visceral tissue. In most cases, a detailed patient history, careful examination of the patient’s skin, and evaluation of other visceral primary sites are necessary to determine the primary or metastatic nature of the tumor.

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There are no conflicts of interest.

**REFERENCES**