A Rare Case of Cutaneous Metastasis from Bladder Sarcomatoid Urothelial Carcinoma

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Abstract
Skin metastases from urothelial cancers are relatively uncommon, with an incidence of about 0.84% to 3.6% and only 0.84% of skin metastases caused by urinary bladder malignancies. We report the case of a 52-year-old bladder cancer male patient who underwent bladder transurethral resection. The histopathological examination revealed sarcomatoid urothelial carcinoma without muscle invasion. One year later he presented with bladder mass and skin lesions. Skin biopsy confirmed metastasis from sarcomatoid bladder cancer.

Keywords: Urothelial Carcinoma; Cutaneous Metastasis; Urinary bladder malignancies

Introduction
Bladder tumor is one of the most common genitourinary tract cancer. It is the fourth most frequent cancer in male patients and men women ratio is 3.8:1 [1-3]. The most common subtype is the urothelial cell carcinoma, also known as transitional cell carcinoma. Sarcomatoid urothelial carcinoma is an uncommon histological variant of urothelial carcinoma. The majority of sarcomatoid urothelial carcinomas are found in the urinary bladder [4].

Bladder carcinoma metastases rate is 4%-8% and the most common sites of metastases are lymph nodes, lung, liver, and bone [3,5]. Skin metastases from urothelial cancers are relatively uncommon, ratio is only about 0.84% to 3.6% [6].

The clinical presentation of cutaneous metastases is variable and infiltrated plaques or nodules are the most common clinical presentation [6]. We report a rare case of extensive nodular skin metastasis as the first metastasis site of sarcomatoid urothelial carcinoma from bladder.

Case Presentation
A 52-year-old male patient presented with hematuria and transurethral resection of a bladder tumor was performed one year ago in another institution. The histopathological examination revealed sarcomatoid urothelial carcinoma without muscle invasion. Initial stage was non metastatic disease. Patient didn’t accept both treatment and follow up. He applied to our clinic with the complaint of massive bleeding from skin lesions in January 2018. On physical examination conjunctivae were pale and two ulcerated, red, raised lesions from the skin were obtained in the left scapular region and in the left upper abdomen (Figure 1). Staging was performed by F18-Fluorodeoxyglucose Positron emission tomography (18F-FDG PET CT) scan which revealed two tumoral masses, one of which was 90 mm x 53 mm in diameter with SUV max value (standardized uptake value) 20, located on the left upper quadrant of the anterior rectus abdomin muscle and protruding to the skin. The other lesion was 78 mm x 50 mm in diameter with SUV max value 15.3, located on the left infraspinatus muscle and protruding to the skin. No additional metastatic findings were found on imaging except for slightly increased FDG uptake was detected in the bladder wall (Figure 2). The histopathological examination of transurethral resection of the bladder was consistent with sarcomatoid urothelial carcinoma. Furthermore, biopsy of the skin lesions was done and metastasis of sarcomatoid urothelial carcinoma was diagnosed. Immunohistochemical study results of both biopsies were as follows; PanCK, HMW-CK, CK7, P63, vimentin positive; S-100, Melan A, NSE, LCA negative. Ki-67 proliferation index was found to be 20% (Figure 3). External palliative radiotherapy, which was 15 fractions and 40 GY, and then followed three, cycles 1000 mg/m² gemcitabine
caused by urinary bladder malignancies [6,14]. An incidence of about 0.84%-3.6% and only 0.84% of skin metastases from urothelial cancers are relatively uncommon, with colon (19%) and head and neck tumors (12%) [11-13]. Skin metastases of urothelial neoplasms appear as plaques or either single or multiple nodules, erythematous, infiltrated, with an ulcerated or necrotic aspect [6,15]. In our patient ulcerated nodular lesions protruding to skin were examined.

The histological diagnosis is done based on the hematoxilin-eosin test and immunohistochemical study; cytokeratins for epithelial component and vimentin, desmin HHF-35, SMA or S100 for mesenchymal component [8]. In our case both of bladder and skin biopsies showed PanCK, HMW-CK, CK7 positivity for epithelial component and vimentin positivity for mesenchymal component.

In metastatic bladder cancer patients methotrexate, doxorubicin, vinblastine or cisplatin can be used as single agent chemotherapeutic have response rate in 15% to 25% of patients, while in combination chemotherapy regimens this increases to 50% to 70% of cases [16]. Prognosis of skin metastatic bladder cancerpateintsis generally poorer and median survival is less than 1 year. Treatment options in cutaneous metastasis of bladder carcinoma consist of systemic therapy with cisplatin-based chemotherapy, localized therapy to the cutaneous metastasis with electrochemotherapy using bleomycin and localized radiation [15]. Craig et al. represent a case with complete clinical resolution of two metastatic skin lesions in a patient treated by cystoprostatectomy for bladder carcinoma, using local irradiation [17]. Kubata et al. also report complete resolution of a case obtained by cystoprostatectomy for bladder carcinoma, using local irradiation [17].

In our patient the first and only site of metastasis was skin, which was present at the first visit. The patient was treated with palliative radiotherapy to skin lesions and as systemic therapy cisplatin-gemcitabine chemotherapy was applied. Skin lesions responded to the treatment, but the general course of the disease was evaluated as progression. The patient will be followed-up with second-line treatment.

**Conclusion**

In conclusion the cutaneous metastasis of urothelial neoplasms has poor prognosis. It occurs mostly in late phases of the tumor and is the first sign of dissemination rarely. For the patients with urologic malignancies, physicians should do physical examination of the skin carefully, because skin lesions can be the first sign of silent or recurrent urologic malignancies.

**References**


