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Parastomal skin metastasis in a patient with history of urinary bladder cancer

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ABSTRACT

Transitional cell cancer of the urinary bladder very rarely metastasize to the skin. Herein, we present a patient with urinary bladder cancer who underwent radical cystoprostatectomy and ileal conduit surgery. During follow-up, he developed lung and skin metastases. However, the latter presented as a solitary sessile polypoid lesion at the parastomal area.

1. Introduction

Cutaneous metastases of transitional cell carcinoma of the bladder are rare clinical conditions, and there are limited publications on this subject.[1] However, it is known that metastatic disease develops in approximately 50% of patients after radical cystectomy, and only a few of these metastases could be observed in the skin. This study reports a case of metastatic transitional cell carcinoma of the bladder. The metastasis occurred solitarily in the parastomal area in a patient with a history of radical cystectomy and ileal conduit.

2. Case report

A 76-year-old male patient presented to our outpatient clinic with the complaint of painless, clotted hematuria. The patient underwent a diagnostic cystoscopy which revealed a bladder tumor. Subsequently, transurethral bladder tumor resection was performed. Histopathological assessment elucidated a high-grade transitional cell carcinoma with extensive muscularis propria invasion. The radiological staging of the patient did not show any systemic metastases. The patient received three courses of neoadjuvant cisplatin and gemcitabine chemotherapy. Radical cystoprostatectomy, pelvic lymph node dissection, and urinary diversion with an ileal conduit were performed. Postoperative histopathological analysis revealed perineural and perivesical fatty tissue invasion. However, no prostate gland or pelvic lymph node involvement was observed. The bladder cancer was staged as T3aN0M0 based on tumor-node-metastasis (TNM) classification. After being discharged from the inpatient floor, the patient was followed at the urology clinic as an outpatient every six months. After a 30-month uneventful follow-up, the computerized tomography scan revealed a 4 cm nodule in the lower lobe of the left lung. A tru-cut biopsy was taken from this nodule by the interventional radiology team. The histopathological assessment showed that it was a metastatic malignant epithelial tumor.

Subsequently, the patient was declared T3aN0M1b, and 4-cycle gemcitabine-cisplatin chemotherapy was given. After completing the chemotherapy, the patient was scheduled for follow-up at both urology and medical oncology outpatient clinics. Nevertheless, the patient did not comply with the follow-up program because of the coronavirus disease- 2019 pandemic. One year after completing the chemotherapy, the patient presented to the urology clinic for the postoperative 42 months follow-up encounter. The examination of the stoma revealed a sessile 3 × 1 cm parastomal polypoid skin lesion. This lesion was initially thought to be due to chronic irritation of the parastomal skin, and it was followed closely. During a 3-month follow-up, it enlarged to 4 × 2 cm, and its surface has become ulcerated (Fig. 1). The final decision was the excision of this lesion under local anesthesia (Fig. 2). The histopathology report revealed a malignant epithelial tumor, the primary of which might be urinary bladder cancer (Fig. 3). No tumor was observed in the surgical margins. The patient was scheduled for further chemotherapy, but he did not consent to this treatment. The patient died soon before the postoperative 42nd-month follow-up encounter.

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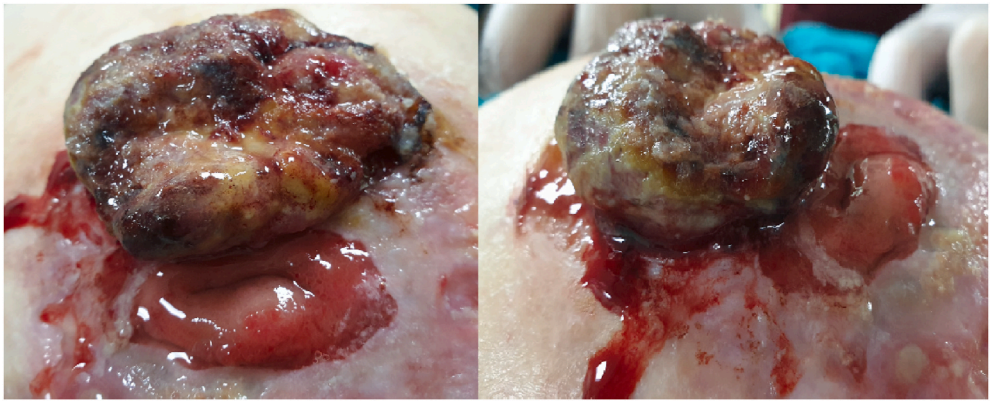

Fig. 1. Image of parastomal skin lesion.

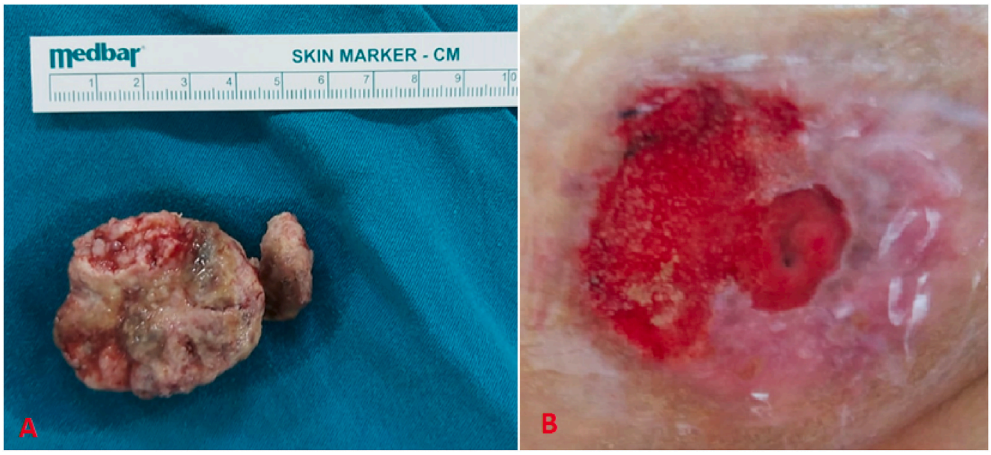

Fig. 2. A: Post-excision image of the parastomal skin lesion B: Image of the stoma and parastomal area in the healing phase after excision of the parastomal skin lesion.

3. Discussion

Skin metastases due to transitional cell carcinoma of the bladder are very rare and usually occur in the late stages of the disease.[1] Mueller et al. reported the incidence of cutaneous metastasis as 1,3% in patients with primary urologic cancers and 0,84% in patients with bladder cancer.[1] Although metastatic cutaneous lesions of the transitional cell carcinomas might be multiple or solitary, solitary lesions are uncommon.[2] While some authors reported recurrences of urinary bladder carcinomas in the ileal conduit or at the uretero-ileal anastomosis sites, only a few cases of parastomal solitary skin metastases have been reported.[2–5]

Metastatic spread of transitional cell cancer to the skin and subcutaneous tissues can occur via direct tumor invasion, lymphatic spread, hematogenous spread, or iatrogenic implantation.[1] Iatrogenic implantation was suggested to be the main route of skin metastasis in surgically treated bladder cancer cases.[5] It is known that the most common bladder cancer metastasis sites are regional lymph nodes, liver, lungs, and bones.[1,5] In our case, there was lung metastasis in addition to skin metastasis. Although the parastomal location of the metastatic lesion may suggest direct invasion, the absence of recurrence of transitional cell carcinoma in the stoma and ileal conduit lowers this risk. Furthermore, the presence of lung metastasis suggests hematogenous spread.

Yoshida et al. detected a parastomal skin lesion in their patient 54 months after radical cystoprostatectomy and ileal conduit surgery.[5] They initially followed this lesion but decided to excise it since it enlarged during a 4-month follow-up period. Excision of this lesion and subsequent histopathological analysis demonstrated parastomal skin metastasis of the urinary bladder cancer.

Chemotherapy, surgical excision, radiotherapy, palliative, and supportive treatment methods can be used for treating transitional cell cancers with skin metastases.[1,4,5] The main chemotherapy regimens are gemcitabine-cisplatin combination and MVAC protocol (methotrexate, vinblastine, doxorubicin, cisplatin), but the survival does not usually exceed 14 months.[1,4,5] Although the data about surgical excision are insufficient, its feasibility has been demonstrated in resectable cases.[3–5] Our case received gemcitabine-cisplatin chemotherapy after detection of lung metastasis. However, the patient was not compliant with his follow-up protocol, and later, he presented with a parastomal solitary skin lesion. This lesion was surgically excised. Since most of these lesions can be excised under local anesthesia and excision is critical for correct histopathological diagnosis, excision of solitary metastatic cutaneous lesions is recommended.[2–5] Excision and histopathological assessment are also crucial for differentiating metastatic lesions from benign skin lesions such as furuncles, erysipeloids, herpes zoster, and pseudoaneurysms.[3–5]

4. Conclusion

In patients with a history of bladder cancer, parastomal skin lesions should be excised to confirm or exclude metastatic disease.

Financial conflict of interest

This study received no financial support.

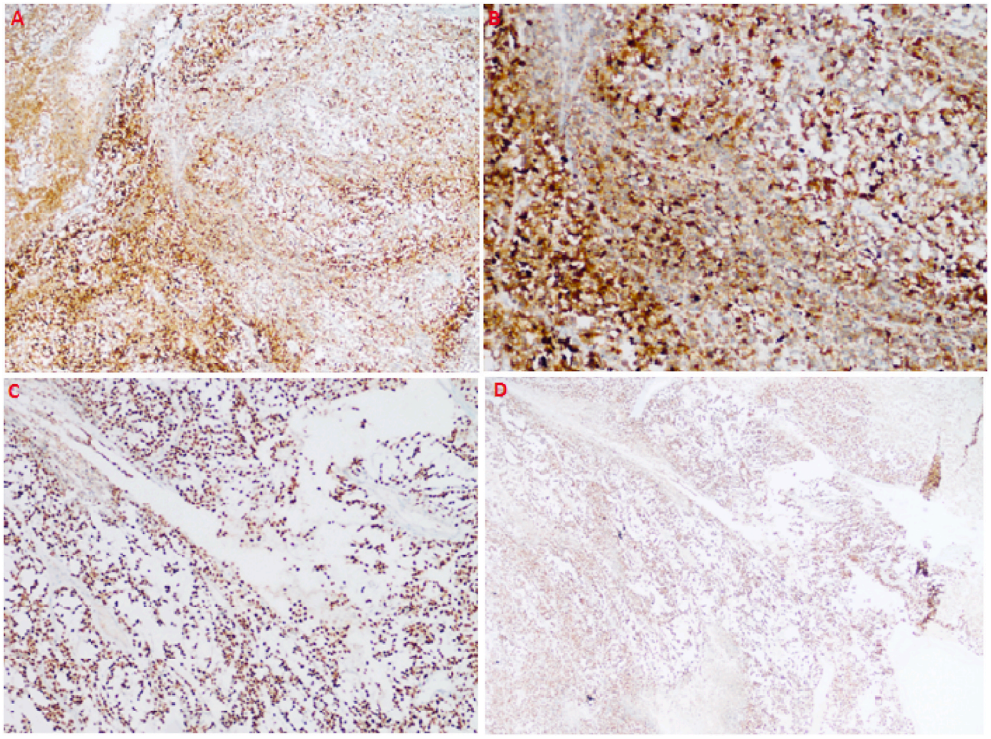

Fig. 3. A: Histopathological photomicrograph shows strong CAM 5.2 staining in tumor cells at ×4 magnification indicating the cells are of epithelial origin. B: Strong CAM 5.2 staining in tumor cells at ×40 magnification indicating the cells are of epithelial origin C: Histopathological photomicrograph shows diffuse strong GATA-3 expression in tumor cells at ×40 magnification indicating the cells are of urothelial origin. D: Diffuse strong GATA-3 expression in tumor cells at ×4 magnification indicating that the cells are of urothelial origin.

Declaration of competing interest

The authors declare no conflict of interest.

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