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Cutaneous Metastasis from Urinary Bladder Carcinoma

Dr Renuka Verma[1], Dr Navneet Kaur[2], Dr Anjali Ahalawat[3], Dr Sonia Chhabra[4], Dr Sunita Singh[5]

[1]Associate Professor, Department of Pathology, Pt. B.D. Sharma Post Graduate Institute of Medical Sciences, Rohtak, Haryana, India.
[2]Junior resident, Department of Pathology, Pt. B.D. Sharma Post Graduate Institute of Medical Sciences, Rohtak, Haryana, India.
[3]Senior resident, Department of Pathology, Pt. B.D. Sharma Post Graduate Institute of Medical Sciences, Rohtak, Haryana, India.
[4]Professor, Department of Pathology, Pt. B.D. Sharma Post Graduate Institute of Medical Sciences, Rohtak, Haryana, India.
[5]Senior Professor and Head of Department of Pathology, Pt. B.D. Sharma Post Graduate Institute of Medical Sciences, Rohtak, Haryana, India.

Corresponding Author: Dr Navneet Kaur

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ABSTRACT

Cutaneous metastasis from transitional cell carcinoma (TCC) of the urinary bladder is very rare presentation. In our case report, a 51-year-old male, presented with an infra scapular subcutaneous nodule after 4 years of initial diagnosis and treatment for TCC of the urinary bladder. FNAC confirmed metastasis. The prognosis remains poor despite treatment. So, early detection and management becomes very much crucial.

KEYWORDS: Transitional cell carcinoma, cutaneous metastasis, fine needle aspiration cytology, chemotherapy, radiotherapy, poor prognosis

INTRODUCTION

Cutaneous metastasis from transitional cell carcinoma urinary bladder is very rare and usually first sign of an advanced disease.[1] The incidence of cutaneous metastasis from transitional cell carcinoma (TCC) urinary bladder is reported to be less than 1% and ranges from 0.18 to 2%.[2] Lymph nodes, liver, lung and bone are most common metastatic site for bladder carcinoma. Skin is included in the uncommon sites of distant metastasis.[2, 3] It can present as nodular, inflammatory and fibrotic lesion.[4] In this case report, we present a patient with transitional cell carcinoma who developed subcutaneous metastasis after 4 years of initial diagnosis.

CASE REPORT

A 51year-old male presented with swelling in right sided (infra-scapular) back region since 2 months. The swelling was tender and progressive in nature. History of weight loss was also present. On physical examination it was 6X5cm in size, soft in consistency and non-mobile. There was no lymphadenopathy and patient did not have any other significant finding. Though the patient had a significant past history. The patient had haematuria 5 year back for which CECT abdomen was performed along with other routine investigations. CECT abdomen revealed moderate irregular wall thickening of left lateral and posterior wall of urinary bladder.

Transurethral resection of bladder tumor (TURBT) was done for the same which revealed high grade urothelial carcinoma infiltrating into lamina propria and muscle tissue included in the biopsy (T3 N0 M0 stage IIIA). Patient underwent radiotherapy and chemotherapy for the same.

Taking into account the past history of carcinoma, patient was thoroughly evaluated. On ultrasonography, a soft tissue like lesion showing vascularity in nature on colour doppler measuring 4.8 x 5.9 x 4.7 cm noted in muscular plane extending into intercostal space abutting pleura of right lung.

USG guided fine needle aspiration cytology performed from right subscapular region yielded blood mixed aspirate. Smears prepared and stained with wright- Giemsa method were cellular and show discrete and loosely clustered large malignant cells with moderate to marked nuclear pleomorphism, conspicuous nucleoli in some and moderate amount of cytoplasm. Binucleated to multinucleated tumour giant cells, few elongated cells with tailing of cytoplasm, cystic and pigment laden macrophages and occasional mitotic figure were also seen. Considering the past history and cytomorphology of the malignant cells, a diagnosis of metastasis form transitional cell carcinoma of urinary bladder was made and radiotherapy was planned for the same.

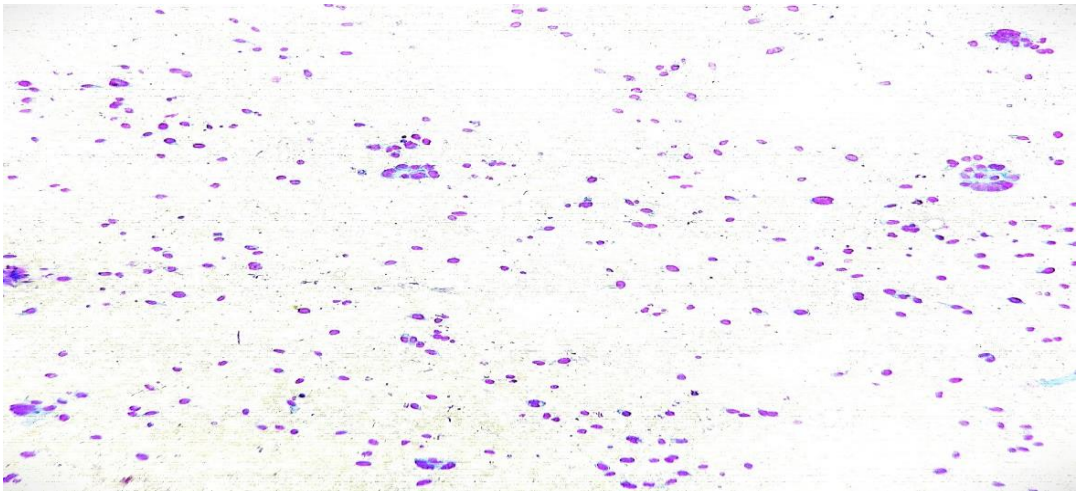

Figure 1: Low Power View 10X: Leishman stained smears showing presence of atypical cells in groups and scattered singly.

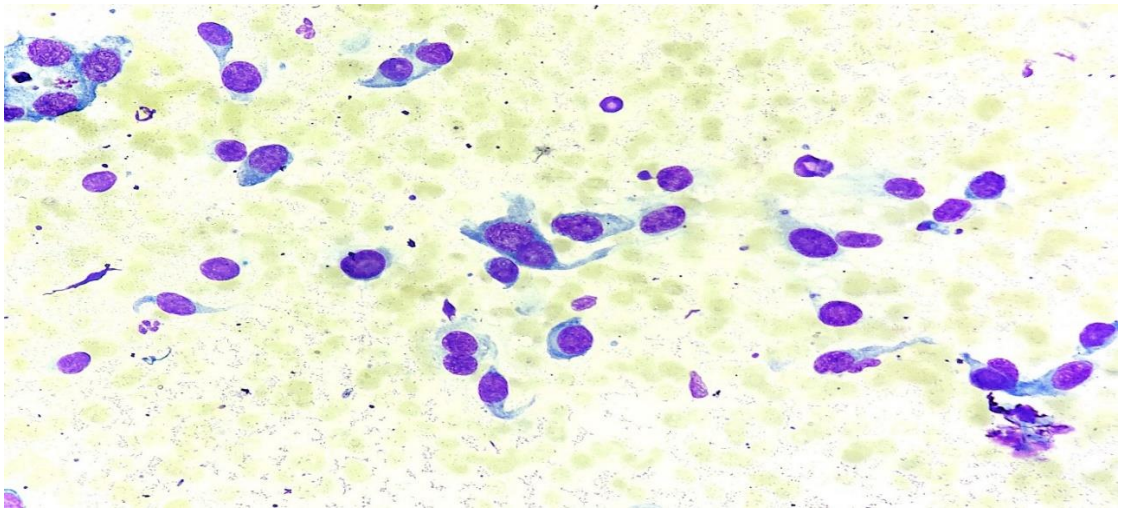

Figure 2: High Power View 40X: Leishman stained smears showing atypical cells with high N:C ratio, hyperchromatic nuclei, inconspicuous nucleoli and tailing of cytoplasm.

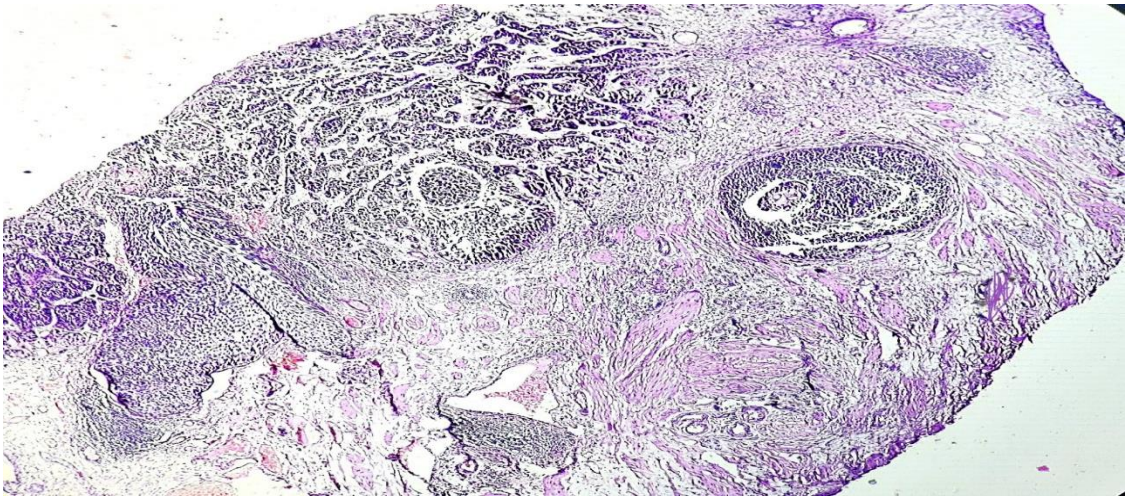

Figure 3: High power view 40X: H&E stained section showing high grade urothelial carcinoma infiltrating the lamina propria and muscularis propria.

DISCUSSION

The metastasis from TCC of the bladder is directly related to depth of penetration of bladder wall, size and grade of tumor but it can also metastasize from superficially invasive primary disease. Cutaneous spread from primary urologic malignancies is rare. Grossly, cutaneous metastasis is not distinctive and may mimic many common dermatologic disorders. It can be solitary or multiple. Direct tumor invasion, hematogenous, lymphatic spread or due to iatrogenic implantation of tumor cells are among the common modes for spread of tumor into skin and subcutaneous tissue.[4] Cutaneous metastasis are often associated with advanced disease and can be the initial sign of visceral recurrence. Appearance of skin metastasis can occur anytime from at the time of diagnosis to months or years after the diagnosis of primary malignancy of urinary bladder.[5] In our patient it appears 4 years after the diagnosis of primary disease. The differential diagnosis considered were skin abscess, primary skin tumor, malignant melanoma that are excluded due to presence of malignant cells, absence of dyskeratotic cells and absence of melanin pigment respectively. The previous history of operated bladder tumor suggested the possibility of transitional cell carcinoma metastasis in our case. The FNA findings along with past and clinical history helped to arrive at the definitive diagnosis.

Because of limited number of cases with cutaneous metastasis of bladder cancer and subsequent short survival, it is not easy to comment on the management of cutaneous metastasis bladder cancer. Treatment options are often limited due to advanced age and disease stage, leading to poor prognosis.

Chemotherapy or radiotherapy can be given for the treatment of skin metastasis. The prognosis of patients with cutaneous spread of bladder cancer is generally poor and the median survival rate is <12 months.[6] However, very rare cases with extended survival have been reported. Treatment of choice for metastatic bladder cancer is chemotherapy, which is rarely curative. In chemotherapy, the combination of gemcitabine and cisplatin and the MVAC scheme (Methotrexate, vinblastine, doxorubicin and cisplatin) are established treatments. However, survival does not exceed 14 months.[7] If does not respond to chemotherapy, local radiation therapy can be given which has also been report to resolve cutaneous lesions.[6] Surgical resection can be performed in cases with persistent or recurrent disease that is resectable.

CONCLUSION

In conclusion, metastatic disease should always be considered in the differential diagnosis in patient with a previous history of bladder cancer who present with cutaneous nodules. Because of the

advancement of disease, treatment is mainly supportive and prognosis is poor.

Declaration by Authors

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Conflict of Interest: The authors declare no conflict of interest.

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