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# CUTANEOUS METASTASIS OF TRANSITIONAL CELL CARCINOMA OF THE RENAL PELVIS – CASE REPORT

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## INTRODUCTION

Cutaneous metastases from transitional cell carcinoma (TCC), especially of the renal pelvis, are extremely rare[1]. In the limited number of reported cases they result mainly from iatrogenic seeding[2]. They are commonly considered as a very late though always unusual manifestation of systemic tumor spread[3].

We herein present an interesting case of extensive skin metastasis as a primary manifestation of TCC of the renal pelvis.

## CASE REPORT

A 94-year-old man was referred by his general practitioner due to cutaneous lumps on various sites of his body including chin, neck, shoulder, chest and right axilla. The lesions measured between 5 and 10 cm in diameter, were reddish brown in color, erythematous, and slightly pruritic (Fig. 1). The regional superficial lymph nodes were not palpable.

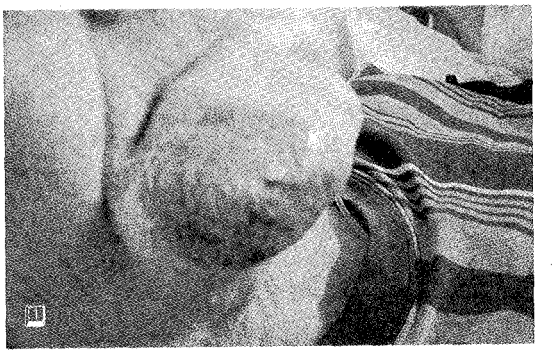

**Fig. 1:** Appearance of the metastatic lesion at the chin

Ten years before, the patient had undergone transurethral resection of a superficial TCC of the bladder. Subsequent follow-up consisting of clinical examination, radiological imaging and regular endoscopic examination had revealed no evidence of recurrent disease. Six years later the patient was diagnosed with prostate cancer, Gleason 4+4, which was treated by transurethral resection of the prostate and bilateral orchidectomy. Following this intervention, the patient initially remained asymptomatic, but two years later he noticed persistent hematuria despite normal cystoscopies. Imaging with ultrasound scan, intravenous pyelogam and computer tomography revealed a TCC in his right upper kidney pole. This was treated by laparoscopic nephrectomy. Histology revealed a grade-3 papillary TCC of the renal pelvis and calyces with focal invasion of the renal parenchyma, renal vein and perihilar fat (pT3) and a grade-3 papillary and flat carcinoma in situ of the right ureter involving the ureteric resection margin. Due to the patient's advanced age no formal nephroureterectomy was performed and a decision was made for regular endoscopic follow-up and urinary bladder instillation with BCG for six weeks.

Further investigations showed no tumor recurrence in the right ureteric stump, and the patient remained asymptomatic until he discovered these cutaneous lesions which, on fine needle aspiration cytology, were identified as cutaneous metastases. A subsequent bone scan showed suspicious looking lesions in the ribs. Since then the patient's condition deteriorated rapidly, and the only treatment option was palliative with radiotherapy.

## DISCUSSION

Transitional cell carcinoma (TCC) of the genitourinary system rarely metastasizes to the skin. The main primary sites of TCC metastasis from the urinary system are liver, lung and bone[2,3]. Most cases originate from the urinary

bladder rather than the renal pelvis. Iatrogenic dissemination of TCC cutaneous metastases may occur during partial cystectomy, suprabubic cystostomy and laparoscopy[2] and such metastases can be found in various sites of the body including the penis[4] , face and extremities[1].

The pattern of metastatic spread varies greatly and can be solitary or multiple in appearance. Four main clinical types have been described in the literature: nodular, inflammatory (carcinoma erysipeloides), sclerodermoid, and a very rare zosteiform lesion. In addition an associated epidermal nevus or a painful, vasculitic cutaneous nodule may occur occasionally[1]. Diagnosis is usually established by microscopic examination of excisional biopsy specimens[5], however, it can be confidently established by fine needle aspiration alone.

In contrast to our case cutaneous metastasis from urinary TCC normally occurs as a late manifestation when metastases are already present elsewhere in the body[1]. The incidence of isolated cutaneous metastasis is reported to be less than 1%. Survival after the appearance of skin metastases is usually limited and measured in months. Clinical progression is usually rapid, and radiotherapy and chemotherapy offer minimal benefit[5].

In conclusion, this case report suggests that particular attention should be paid to physical examination of the skin and the patient as a whole when undergoing surgical procedures for TCC. Urologists should carefully assess patients with cutaneous metastasis to exclude malignancy.

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