CASE REPORT

RENAL CELL CARCINOMA WITH INITIAL PRESENTATION AS ERYTHEMATOUS SKIN METASTASIS

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ABSTRACT

Presentation of renal cell carcinoma (RCC) with classic triad of flank pain, haematuria and a palpable abdominal mass is uncommon. Most of the cases present with only one of these symptoms or as an incidental diagnosis as a result of radiological imaging done for another reason. RCC with metastasis to the skin is uncommon. We report a case of renal cell carcinoma presenting with skin metastasis to trunk with signs of inflammation being suspected as an abscess. Following investigations and biopsy confirmation patient underwent palliative radiotherapy to skin lesions and referred for palliative nephrectomy.

Key words *Renal cell carcinoma, Skin metastasis, Radiotherapy.*

INTRODUCTION:

Renal cell carcinoma accounts for 3% of all adult malignancies.[1] Renal cell carcinoma has been well described for its tendency to metastasize, occurring in approximately one third of patients at the time of diagnosis. However metastasis from RCC to the skin is much less common. An incidence of 3.4% has been reported in our previous case report.[2]

CASE REPORT:

A 65 year old male presented at department of oncology with painful erythematous skin nodule on the lower back, and was thought to be an abscess. The lesion had been present for 4 months and not improved despite a six week course of antibiotics. The lesion had increased in size over two weeks with some pain but there was no discharge. Patient had other symptoms as well including weight loss for three months and left flank ache.

On general physical examination, patient was malnourished, emaciated with a prominent skin lesion on lower back of size 5cm×5cm in diameter. The lesion was severely tender, erythematous and tense resembling an abscess. Further skin examination revealed another lesion on back of chest of size 2cm x2cm and non tender (Fig.I), however he was afebrile. Per abdominal examination revealed a diffuse right lumbar mass but no visceromegaly. Baseline investigation including full blood count, urea and electrolytes, liver function tests and chest x-ray were within normal limits. In view of weight loss and right flank mass he was admitted for further investigation with a strong doubt of some malignancy with a differential diagnosis of either lymphoma or least likely a renal cell carcinoma.

The patient had a computed tomography (CT) scan of the abdomen and pelvis which showed a right renal mass of size 10cm×6cm with skin and subcutaneous metastasis and bony lytic lesions (Fig.II). Further staging work up showed a positive bone scan. Urology team did biopsy of skin lesions. The histopathology examination of skin biopsy showed clear cell renal carcinoma consisting with primary right renal carcinoma. Patient was referred to us for palliative radiotherapy to painful skin metastasis. After receiving 30 Gray (Gy), he was

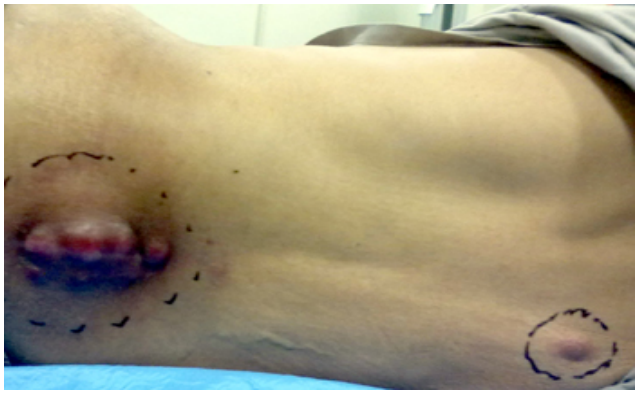

Figure I: Physical examination revealed two skin erythematous nodules at lower back and chest.

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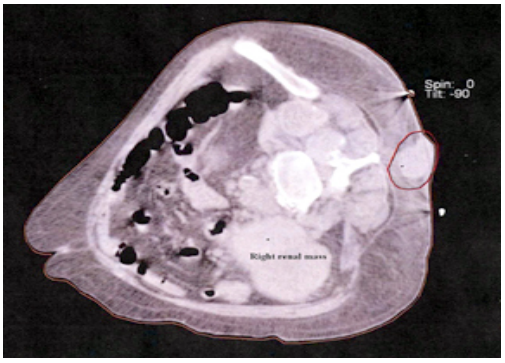

Figure II: Computerized tomography lateral scan showing skin/subcutaneous metastases, right renal mass and bony lytic lesions.

referred to urology team for palliative nephrectomy.

DISCUSSION:

One large study based on 6577 autopsies of unrecognised RCC, documented that the skin was the 7th most common site of metastasis and RCC was the primary tumor in approximately 6% cases of skin metastasis.[3]

According to Dorairajan LN et al [4], the common sites for skin metastases were the trunk (40%), followed by the scalp (25%) and face (8%); of whom 24% had skin metastases at the time of diagnosis. A large Indian study, reviewing a total of 306 patients with RCC seen over a 12 year period found only 10 cases (3.3%) with skin metastasis, of whom, half of the patients presented with skin metastasis during follow-up after nephrectomy. In only one case the skin nodule was actually the presenting symptom.[5] Our patient had skin metastases as presenting complaint. Other authors have reported single cases.[6, 7] Skin metastasis is considered as a poor prognostic factor for survival.[8]

Metastasis at the time of diagnosis frequently occurs in RCC, with the skin not infrequently involved. Clinicians should be aware of the possibility of primary malignancy in patients presenting with cutaneous lesions, therefore a careful examination of the skin is required in patients with RCC. Prompt diagnosis and treatment may affect outcome.

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