Dermatology Practical & Conceptual

Atypical Cutaneous Metastasis in Clear Cell Renal Carcinoma

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Case Presentation

A 73-year-old male patient presented for consultation with a complaint of an "infected cyst" on the left dorsal region, persisting for over six months and refractory to antibiotic treatment. His medical history included a radical nephrectomy of right kidney for clear cell renal carcinoma (ccRCC) two years prior, currently on adjuvant Pazopanib.

Two years after surgery, examination revealed a 5×4 cm erythematous, non-inflammatory tumor on the left dorsal region. Dermoscopy showed prominent linear branched nonfocus vessels, scales, and white structureless areas. The ultrasound presented a solid, heterogeneous nodule in the subcutaneous tissue at the dorsolumbar spine measuring 5.5 × 4.6 cm.

Doppler imaging showed intense intralesional vascularization with low-resistance flow. Histopathological analysis confirmed carcinoma involving the dermis. Immunohistochemical analysis showed positivity for PAX-8, RCC and TTF-1 and was negative for CK7, CK20, CD34, HSV8, S100, PSA, and CDX2, establishing the diagnosis of metastatic carcinoma originating from a renal primary site. Palliative radiotherapy (25 Gy/5fx) and nivolumab were proposed. The patient has pulmonary and bone metastases but remains in good condition, despite a guarded prognosis.

Teaching Point

Cutaneous metastases are rare in ccRCC, occurring in 2.8–6.8% of cases, with a median survival of six months [1,2]. They typically present as rapidly growing nodular lesions, ranging in color from skin-toned to red-purple, and are often located on the face, scalp, chest, and abdomen [2]. It is crucial to maintain heightened vigilance for atypical lesions in patients with a history of malignancy, as cutaneous metastases may manifest in uncommon characterized patterns.

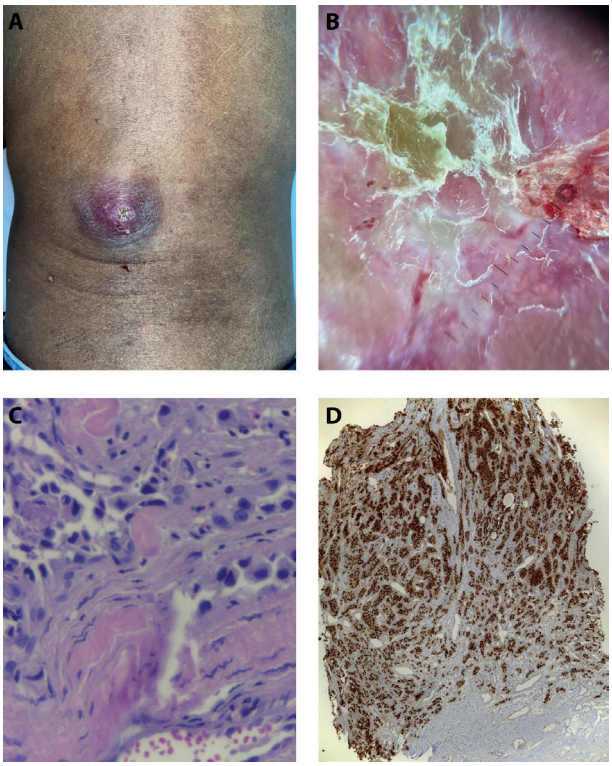

Figure 1. A) Erythematous tumor lesion approximately 5×4 cm in size located on the left dorsal region; B) Dermoscopy showing prominent linear branched nonfocus vessels, scales, and white structureless areas; C) Histological section showing infiltration of neoplastic cells in the dermis (Hematoxilin&Eosin, 40x, original magnification); D) Immunohistochemical examination showing neoplastic cells positive for the anti-Pax-8 antibody, confirming renal origin (40x, original magnification).

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