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Sir,

Metastatic renal cell carcinoma presenting as a chalazion

Metastatic renal cell carcinoma to the eye and orbit,[1–3] although uncommon, has been previously reported. We report a case of a recurrent chalazion, which, following biopsy, proved to be a metastasis to the eyelid in a patient with no previous history of malignancy. This case illustrates and highlights the importance of biopsying recurrent chalazions.

Case report

A 51-year-old Caucasian gentleman was referred by his general practitioner (GP) with a 4-month history of a progressively increasing lesion on the right lower lid that did not respond to topical antibiotic therapy. There was no associated lid pain or discharge. There was no significant past medical or surgical history. He had smoked 30 cigarettes per day for 30 years. Examination in the ophthalmology department revealed a typical chalazion and, therefore, routine incision and curettage was performed with the release of granulomatous material. The patient was subsequently discharged.

Four months following the initial treatment, he was re-referred by his GP as the lesion had not decreased in size. On examination, an 8 mm (L) × 5 mm (H) × 3 mm (D) right lower lid lesion was seen to extend to the lid margin associated with mild vascularization of the overlying skin (Figure 1). As the lesion had not responded to the initial treatment, we decided to perform a biopsy.

Histology showed a clear-celled epithelial neoplasm in which nests and cords of bland appearing cells were set within a rich sinusoidal vascular network (Figure 2).

The immunohistochemical profile was very suggestive of a carcinoma of primary renal cell origin. Investigation for a primary neoplasm was recommended.

In light of the histology report, an urgent urology opinion was sought. On further questioning, the patient denied any weight loss, abdominal pain, or swelling. Abdominal examination was unremarkable with no tenderness or masses.

A computerized tomography scan of the abdomen showed an 8.7 cm heterogeneous enhancing necrotic tumour in the upper and interpolar region of the right kidney (Figure 3). In addition, there was also a 2.3 cm right adrenal mass abutting close to the wall of the inferior vena cava.

Following discussion of the management options with the patient, a right radical nephrectomy and adrenalectomy was performed. Histology confirmed a clear-cell renal cell carcinoma with no lymph node or local vascular involvement.

Following recovery from the nephrectomy, we performed an excision of the right lower lid lesion with primary lid closure.

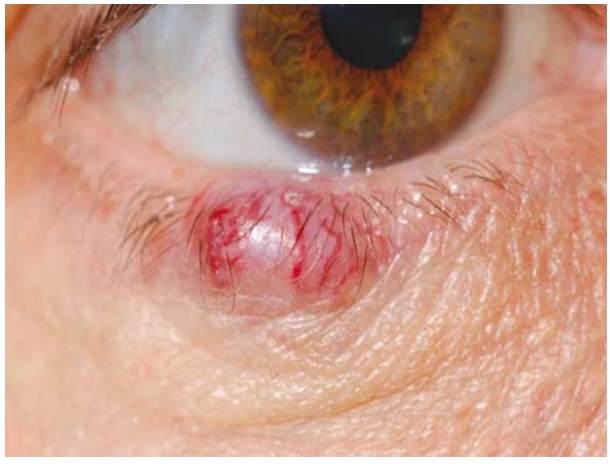

Figure 1 Picture of right lower lid lesion.

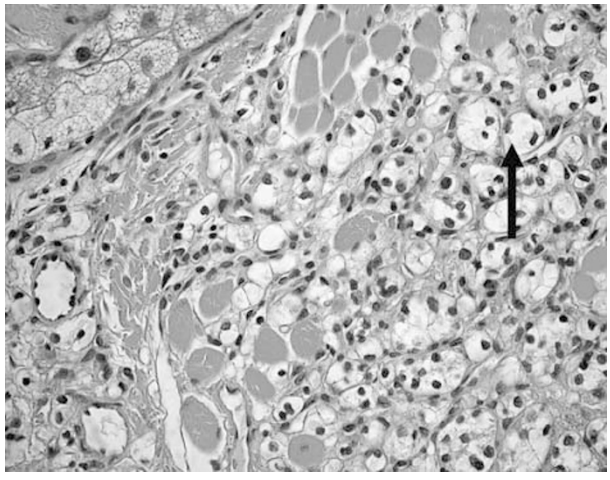

Figure 2 High-power micrograph of right lower lid biopsy showing clear cells (arrow) infiltrating skeletal muscle.

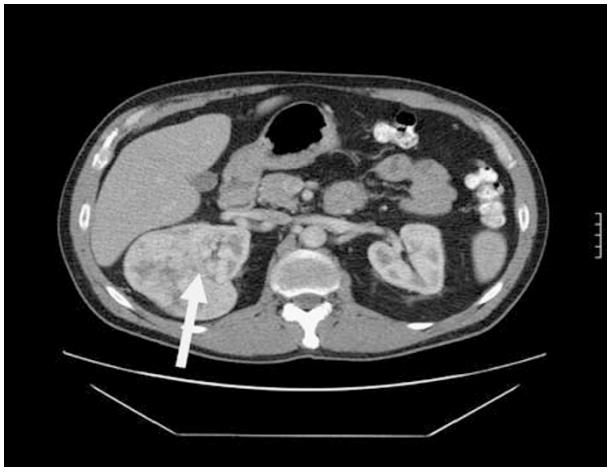

Figure 3 Axial computer tomography scan showing right renal cell carcinoma (arrow).

Comment

Renal cell carcinoma represents 3% of adult malignancies and accounts for 90–95% of all malignant neoplasms arising from the kidneys.[4] In terms of epidemiology, the male to female ratio is two to one and its peak incidence is between the age of 50 and 70 years.[4]

Metastatic disease is common, with approximately one-quarter of all patients with renal cell carcinoma having distant metastasis at the time the primary tumour is diagnosed.[5] The most frequent metastatic sites are the lung (50%) and bone (33%), although renal cell carcinoma have been described to metastasize to almost every organ in the body.[5,6]

Renal cell carcinoma, presenting as late metastases to the eyelid, uvea, and orbit, has been previously reported.[2] Orbital, conjunctival,[1] and iris lesions[7] histologically diagnosed as metastatic renal cell carcinoma before the diagnosis of primary renal cell carcinoma have also been described.

Renal cell carcinoma metastasizing to the eyelid is uncommon. Riley,[8] in 1970, reviewed the literature and 15 cases from the Mayo tissue registry of patients with metastatic lesions to the eyelid. The most common primary tumours in the series were breast, melanoma, lung, and stomach. There were no reported cases of renal cell carcinoma.

Kindermann *et al*,[2] in 1981, described metastatic renal cell carcinoma presenting with a '10-day history of an expanding mass' in the lid. However, the patient had been diagnosed with renal cell carcinoma 15 months before and had undergone nephrectomy and radiation therapy. Our case is different in that the patient had no abdominal symptoms or signs and had presented insidiously with a lower lid lesion clinically, initially resembling a chalazion.

This case is unique, as the patient presented with a recurrent 'chalazion-like' lesion masquerading as a metastasis in the absence of systemic symptoms or signs. Hence, an important message to reiterate is that recurrent or atypical 'chalazion-like' lid lesions must be biopsied.

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