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Renal derived epistaxis

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Abstract
A solitary metastasis to the nose from a renal cell carcinoma is extremely rare. One such case is presented and the argument for aggressive therapy to these lesions is reviewed.

Key words: Epistaxis; Kidney neoplasms, renal cell carcinoma.

Introduction

Metastatic disease to the nasal cavity is rare with less than one hundred episodes having been recorded in the literature (Batsakis, 1971). A case of a solitary renal cell carcinoma metastasis to the nose is presented; a case made even more unusual as only 1.6–3.6 per cent of renal metastases are discovered as a solitary lesion (Middleton, 1967). The mode of presentation and the question of how aggressive the therapy of carcinomatosis should be is addressed.

Case report

In February 1990, a previously well, 75-year-old male presented to the general surgeons with a new left varicocele and left sided varicose veins. No lesion was palpable in the abdomen, but ultrasound examination revealed a renal mass. The patient proceeded to nephrectomy, at which time an 8 cm, partially necrotic, carcinoma was discovered in the lower pole of the left kidney. The tumour involved the peri-nephric fat; there was, however, no vascular or nodal involvement. Histology confirmed a renal cell carcinoma and the patient made a good post-operative recovery being discharged on the seventh post-operative day.

In July 1990 he returned with a one month history of recurrent unilateral epistaxis and nasal obstruction associated with a polypoid lesion in the left nasal cavity. This was biopsied and histology suggested it to be a metastasis from the renal carcinoma. Computerized tomography (Fig. 1) demonstrated that the lesion extended from the nasal cavity into both the ethmoid and sphenoid sinuses. Technetium isotope scan (Fig. 2) did show a 'hot spot' in the nose but no others were demonstrated. No other metastases were revealed either by ultrasound examination or biochemical screening.

It was concluded, in conjunction with a radiotherapist, that his metastasis would be unlikely to respond to radiotherapy and therefore despite his age and the extent of the disease a lateral rhinotomy was performed. At surgery an extensive vascular tumour occupying the entire left side of the nose, prolapsing into the post nasal space and eroding the base of the skull was excised. It was a difficult procedure because of the extent of the blood loss which amounted to at least six units of blood. The haemodynamic problems resulted in the patient spending the first post-operative day in the intensive care unit following which he returned to the ENT ward and made an uneventful recovery. In November 1990 the patient underwent a course of radiotherapy to the affected area in two anterior wedged fields to a total of 4250 cGy. The patient is clinically disease free and well two years after the diagnosis was made.

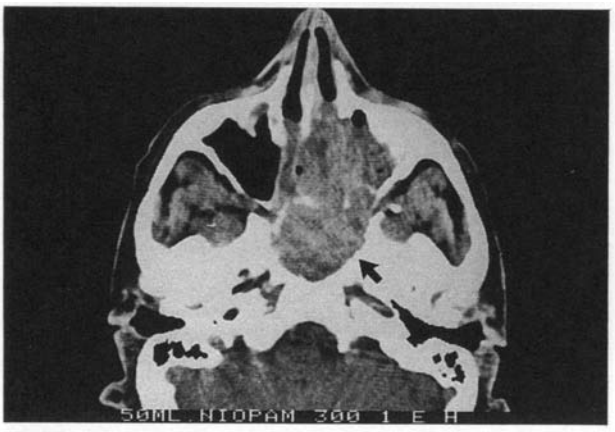

Fig. 1

CT scan of the skull at the level of the nose. The scan demonstrates a large mass in the posterior nasal space which has crossed the midline and is eroding into surrounding structures.

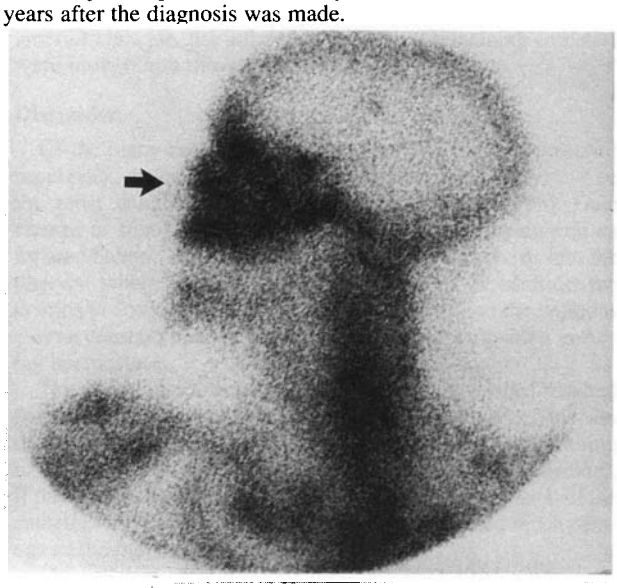

Fig. 2

Isotope bone scan—head and neck region, left lateral view. A Technetium isotope bone scan demonstrates a 'hot spot' in the area of the nose. This is normally an area of poor uptake of isotope.

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Discussion

There are several issues raised from this case worthy of discussion. Firstly the mode of presentation of metastasis in the nose. In common with any mass in a confined space there are non-specific symptoms such as obstruction, swelling and episodes of pain. Epistaxis is however the primary complaint in approximately 50 per cent of cases and this figure may indeed be higher in renal cell derived secondaries (Batsakis, 1971). This is caused by the highly vascular nature of the stroma of renal tumours. Once again this highlights the necessity to examine fully and positively exclude the presence of tumour in anyone with epistaxis.

Secondly, renal cell carcinoma is notoriously unpredictable in terms of its behaviour and metastases have been reported to every site in the body although it has a predilection for lung, bone and the adrenal glands (Bassil *et al.*, 1985). It is, however, responsible for over 14 per cent of metastases to the head and neck in cases where the primary is situated below the clavicles. Although 25 per cent of patients will have secondaries at the time of presentation there is a long latency period, up to 20 years, before they become apparent (Gunbay *et al.*, 1989). Several prognostic indicators have been suggested to aid management, one of which correlates a long latency period with a good prognosis (Katzenstein *et al.*, 1978). Deming and Harvard (1970) relate the outcome to the dimensions of the initial tumour; size <7 cm and its weight <500 g.

The case presented here should have had a poor prognosis as judged by these criteria as the latency time was only five months and its dimensions were greater than those required for an optimal result. This illustrates, once again, the unpredictable nature of the disease. Moreover this vindicates the more aggressive mode of therapy employed on this patient. We would encourage a similar approach to other patients with a solitary nasal metastasis, especially if there is a renal primary, as excision gives substantive palliation if not a cure (Okabe *et al.*, 1992). Evidence is also accumulating which demonstrates that chemotherapy and interferon therapy both have roles in the treatment of metastatic renal cell carcinoma; objective response rates of 28 per cent (Von Roemeling *et al.*, 1988) and 24 per cent (Fujita *et al.*, 1988) respectively give support to our conclusion that aggressive therapy is required.

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