

## Ethmoid metastasis of endometrial carcinoma causing mucocoele of maxillary antrum

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### Abstract

We report a case of an antral mucocoele secondary to the obstruction of its ostium by metastatic endometrial carcinoma. This is the first report of such a cause for a mucocoele, and for a metastasis from such a tumour in the head and neck.

**Key words:** Uterine neoplasms; Neoplasm metastasis; Mucocoele; Maxillary antrum

### Case report

A 50-year-old lady presented with a one-month history of pain in the face with intermittent swelling of the eyelids, variable epiphora and a recent left-sided nasal obstruction. Three months previously she had a Wertheim's hysterectomy for a tumour of the endometrium and endocervical canal with right forniceal involvement (Stage 2a). The hysterectomy specimen and the initial vaginal biopsy showed a very poorly differentiated carcinoma which was positive for the marker cytokeratin and showed small foci of glandular and squamous differentiation. The cancer replaced the endometrial cavity and extended into the

endocervical canal. The outer third of the myometrium was invaded by tumour and deposits were present in the right fallopian tube, broad ligament, vaginal fornix and para-aortic and iliac lymph nodes. There was widespread vascular and lymphatic invasion. She was awaiting chemotherapy.

Examination revealed a smooth tender swelling in the left cheek with fullness in the left upper bucco-gingival sulcus and a slight medial bulging of the left lateral nasal wall with polypoid material in the left middle meatus.

Plain sinus X-rays showed a left maxillary mucocoele. CT confirmed the presence of an expansile mass in the left

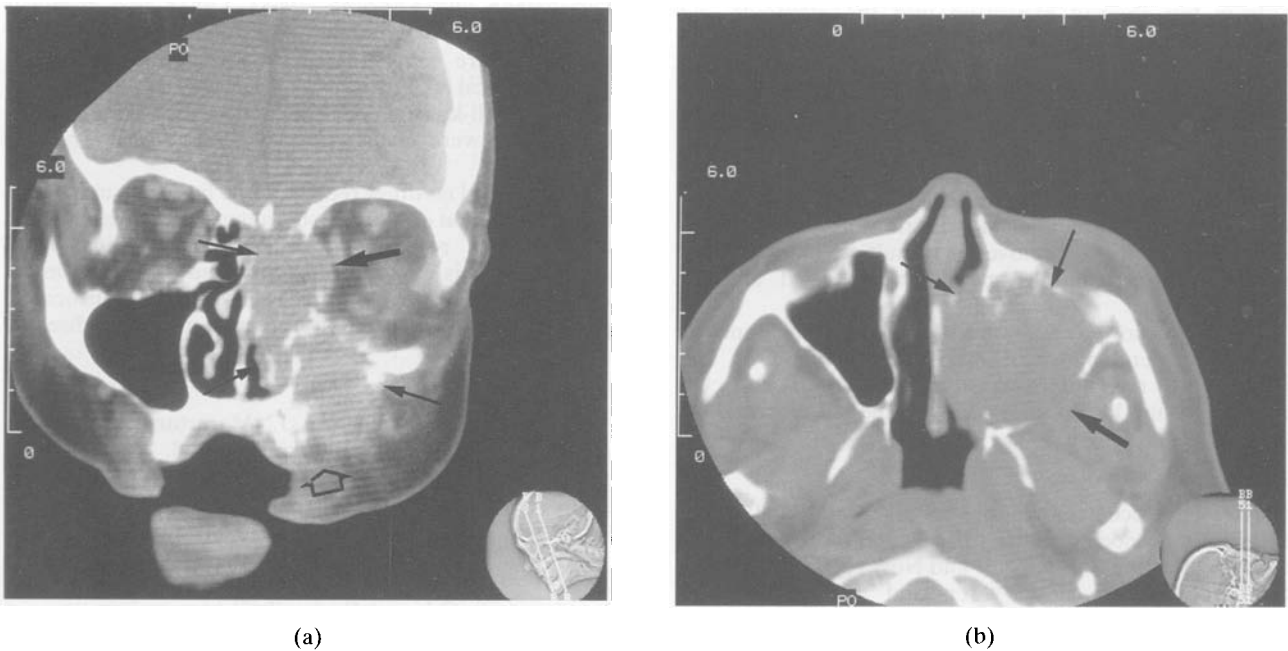


FIG. 1

(a) Coronal CT showing expansile mass (arrows) in left antrum and ethmoids, eroding into nose, orbit (bold arrow) and buccogingival sulcus (open arrow). (b) Axial CT showing expansile mass (arrows) in left antrum with erosion through posterior wall (bold arrow).

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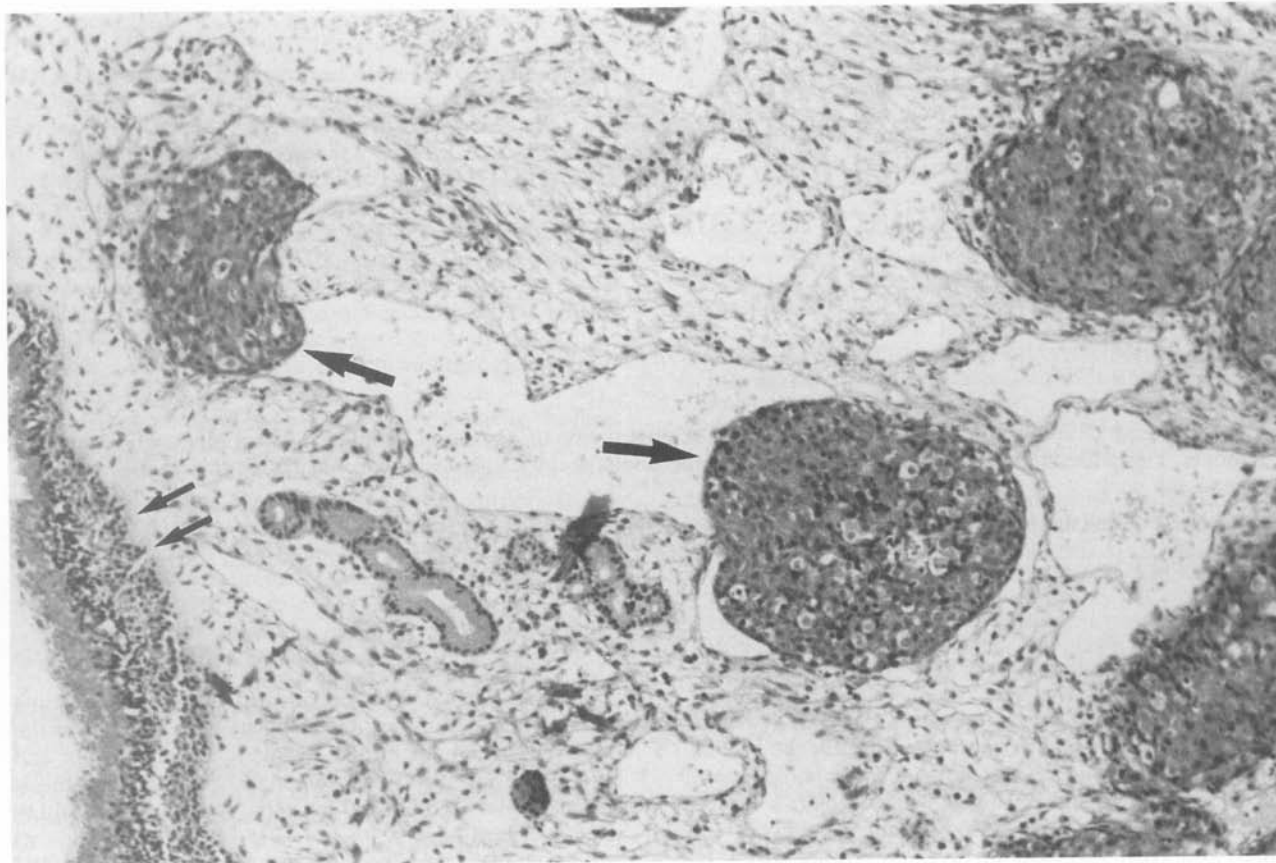


FIG. 2

Biopsy from left ethmoid showing plugs of metastatic carcinoma (arrows) in vascular spaces in the connective tissue beneath the mucosa (double arrow) (H & E;  $\times 40$ ).

antrum but showed expansion into the ethmoids and suggested an erosive process into the nose, orbit and through the posterior wall of the antrum (Figure 1a and b). Left antral puncture enabled aspiration of bloodstained mucus with partial decompression of the swelling and a lessening of the pain. The swelling and pain failed to resolve completely and therefore an examination under anaesthetic was performed in which the left antrum was entered via both middle and inferior meatuses, bloodstained material was removed and multiple biopsies were taken from oedematous middle meatus and anterior ethmoid sinus.

Histology showed carcinoma of the same appearance as the patient's endometrial primary tumour (Figure 2). The patient was referred back to the oncologists for chemotherapy and local radiotherapy to the left maxilla.

### Discussion

Antral mucocoeles are a rare finding. Traditionally, two-thirds of mucocoeles occur in the frontal sinuses and one-third in the ethmoids (Zizmor and Noyek, 1973), although Som and Shugar (1980b) reported a relatively high incidence of 10 per cent in the antrum. Mucocoeles can be primary (mucus retention cysts), or secondary caused by ostial obstruction as a result of infection, trauma, previous surgery, tumour or cystic degeneration of mucosa (Hyams, 1978; Stankiewicz *et al.*, 1993).

Metastatic deposits of any kind in the ears, nose or throat are not common. Friedmann and Osborne (1965) reviewed 72 cases and Mochimatsu *et al* (1993) reviewed seven. By far the commonest primary site was renal

(Friedmann and Osborne, 1965). Other sites included stomach, breast, bronchus, melanoma, prostate and thyroid. There were only two metastases from primary gynaecological malignancies. These were both leiomyosarcomata, well-known for blood-borne spread, and the secondaries were in the frontal sinus and palate respectively.

We can find no other reports in the literature either of a secondary lesion of this tumour in the head and neck, or of a mucocoele resulting from ostial obstruction by a metastasis. This case indicates the need for a high index of suspicion for an unusual cause for a mucocoele, particularly if there is a past history of malignant disease.

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