## Angiosarcoma of the Scalp with Metastasis to the Gingiva

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## Sir.

A 75-year-old Japanese man presented to a dermatologist of Chiba University Hospital with a nodule lesion on the scalp, which had been present for approximately 5 months. He was not immunocompromised. Histopathological examination suggested angiosarcoma. The patient was transferred to our hospital. He had a 50×50 mm ulcer with central necrosis surrounded by haemorrhagic nodules on the frontal region and an adjacent 30 × 30 mm ulcer covered with a bloody crust (Fig. 1a). A biopsy specimen taken from the border of the ulcer showed dermal bleeding and numerous irregular vessels with pleomorphic and atypical cells (Fig. 1b). Immunohistochemical staining demonstrated reactivity of tumour cells to CD31 and EN-4, but not to CD34 or factor VIIIrelated antigen. A diagnosis of ulcerative-type scalp angiosarcoma was made. No other tumours were found with computed tomography (CT) or magnetic resonance imaging of the whole body. The scalp lesion was treated with electron beam radiotherapy at a total dose of 70 Gy and chemotherapy of docetaxel (50-80 mg/m<sup>2</sup>/day) was performed biweekly as a combined therapy. After 10 months, however, the treatment was discontinued due to hypoproteinaemia with anorexia. One month later, the patient was conscious of the intraoral putrid odor, and a dentist reported a maxillary tumour.

The tumour was a  $40 \times 40$  mm purple-red, pedunculated nodule covered with yellowish-white necrotic tissue (Fig. 2), which invaded the gingival sulcus between the



Fig. 2. Clinical findings of gingival metastasisis: The tumour was a  $40 \times 40$  mm pedunculated nodule.

teeth. CT revealed that the oral tumour penetrated into the maxillary sinus with bone disruption.

Histopathological and immunohistochemical findings were consistent with those of the original scalp tumour (Fig. 1c). Therefore, the oral tumour was thought to be metastasis from angiosarcoma of the scalp.

With a total dose of 60 Gy X-ray, the tumour regressed, leaving an ulcer on the gingiva. This was finally identified as gingival metastasis. Unfortunately the patient died 4 months later from pneumothorax and haemothorax. Autopsy confirmed that there was no residual tumour in the maxilla.

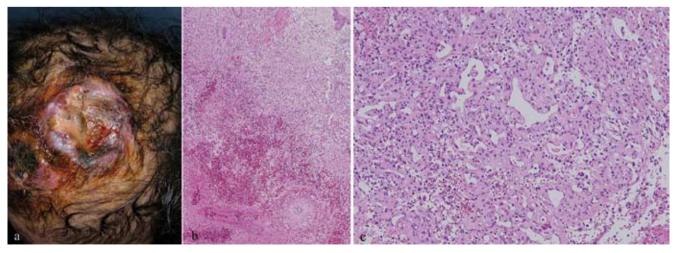


Fig. 1. (a) Clinical findings at the first medical examination: the ulcer was 50×50 mm on his frontal region. (b) Histopathological finding at the first medical examination: Numerous irregular vessels were proliferating with pleomorphic and atypical cells (H&E×40). (c) Histopathological findings of the metastatic oral tumour: The abnormal vascular formation was proliferating with haemorrhage (H&E×200).

Metastatic angiosarcoma in the oral cavity has been reported in 9 cases since 1970, 8 of which had metastasized to gingival (1–9). The reported average survival time after metastasis to the mouth is only approximately 4 months, because most cases experienced whole-body metastasis at the same time. However, the case reported here had only cervical lymph node metastasis elsewhere. Although oral metastatic angiosarcoma is extremely rare, the gingiva is the most common metastatic site in the oral cavity. To our knowledge, however, gingival metastasis from angiosarcoma of the scalp has only been reported in our case.

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