# Metastatic Paraganglioma - A Rare Presentation of Bleeding in the Oral Cavity

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# **Background:**

A 24-year-old male presented with a 4-month history of expanding, non-painful, soft tissue swelling of the oral cavity. He had a history of metastatic paraganglioma, for which he had received chemotherapy, radiation treatment and IV bisphosphonate therapy. He reported no mental nerve sensory disturbance. Two weeks prior the mass had begun to bleed considerably.

#### Methods:

A 4x3x4cm soft, round, well-circumscribed exophytic mass in the right alveolus of the mandible was noted. The swelling appeared to be highly vascularized, with not extra-oral swelling.

## **Results:**

A CBCT showed no disruption in continuity of the cortical mandibular plates. Biopsy findings were consistent with that of a metastatic paraganglioma. The tumour exhibited a nested growth (Zellballen) pattern of chromaffin cells, a diagnostic feature of both paragangliomas and pheochromocytomas. Immunohistochemistry showed positive staining with synaptophysin and chromogranin, markers of neuroendocrine tumours.

### **Conclusion:**

This case describes a presentation of metastatic paraganglioma as a solely soft tissue swelling in the mandible which is exceedingly rare. The aim of this case report is to highlight the importance of diagnosing swellings presenting in the oral cavity through history taking, examination and further investigations.