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A Unique Case of Palatal Metastasis from High-Grade Spindle Cell Sarcoma of Bone

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Investigations

Summary

- Spindle cell sarcoma (SCC) is a rare malignant tumour which can arise in bone and accounts for 2-5% of all bone cancer cases¹
- Distant metastasis to lungs can occur but to our knowledge metastasis to soft palate has not been previously reported
- We describe a unique case of soft palate metastasis in a patient with high-grade SCC of bone who presented with intractable nausea and vomiting and underwent surgical excision for palliation of symptoms

Background

- 68-year old gentleman with history of Asthma, Osteoarthritis, Peptic ulcer disease, Hypertension and previous Pulmonary embolism
- He was diagnosed with high-grade SCC in May 2016 at age 66 and relapsed after about a 2-year disease-free interval in March 2019 during which he was under surveillance (Figure 1)



- Non-contrast CT Chest, abdomen and pelvis confirmed the presence of a low attenuation lesion arising from the posterior aspect of the soft palate and extending into the oropharynx (Figure 3)
- It also showed evidence of progressive disease with enlargement of pulmonary metastasis and evidence of new pulmonary lesions
- CT head and blood investigations were unremarkable



Figure 3: Unenhanced CT image of soft palate mass(*) in sagittal view

Figure 1: Timeline of disease from initial diagnosis

Presentation

- In October 2019 he presented with a 3-week history of a firm, non-tender, rapidly-growing lesion at the roof of his mouth associated with dysphagia and intractable nausea and vomiting
- He denied any associated fever, chills, rigors and bleeding. He also denied any history of preceding trauma in the area or change in medication
- Intra-oral examination revealed a large, friable, pedunculated lesion at the soft palate anterior to the uvula (Figure 2). Extra-oral examination was normal and regional lymph nodes were non-palpable



measuring 22 x 16 x 20mm (TR x AP x CC) and separate from the base of the tongue

Treatment

Uncomplicated surgical excision under local anaesthesia by ENT

Pathology

- Examination of post-surgical specimen revealed findings compatible with metastasis from previous high-grade SCC of humerus (Figure 4):
 - **Microscopy:** fascicles of spindle shaped cells with abundant eosinophilic cytoplasm, marked nuclear pleomorphism and prominent mitotic activity
 - Immunohistochemistry: SMA positive and AE1/3, MNF,S100, Desmin, CD34, CD31, CAM5.2, Caldesmon negative



Figure 2: Intra-oral examination of soft palate lesion

Figure 4: Light microscopy of soft palate mass specimen

Outcome and Follow-up

- Surgery resulted in complete resolution of symptoms. Unfortunately, this lesion recurred 4 months later; requiring further surgery under local anaesthetic
- This case highlights the role of surgery in providing palliation of distressing symptoms in a patient with an otherwise reasonably good quality of life