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Exophytic lesion in the anterior maxilla

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Abstract

65-year-old man was referred to the Oral Medicine Department by his General Dental Practitioner for investigation of a swelling in the anterior maxilla, which had been present for 6 weeks and associated with mobility in the upper central incisors

Title

Exophytic lesion in the anterior maxilla

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Consent statement

Written informed consent was obtained from the patient to publish this report in accordance with the journal's patient consent policy

CASE REPORT

A 65-year-old man was referred to the Oral Medicine Department by his General Dental Practitioner for investigation of a swelling in the anterior maxilla, which had been present for 6 weeks and associated with mobility in the upper central incisors. There was no resolution of the lesion following extraction of the central incisors and three courses of antibiotics.

The patient's medical history was significant for HIV which was managed with a combination antiretroviral and Co-trimoxazole. He was a never smoker and consumed 10 units of alcohol per week.

Extra orally, there was no lymphadenopathy. On intra oral examination a firm, nodular, exophytic soft tissue swelling was noted in the upper anterior maxilla extending to involve the labial sulcus (Figure 1).

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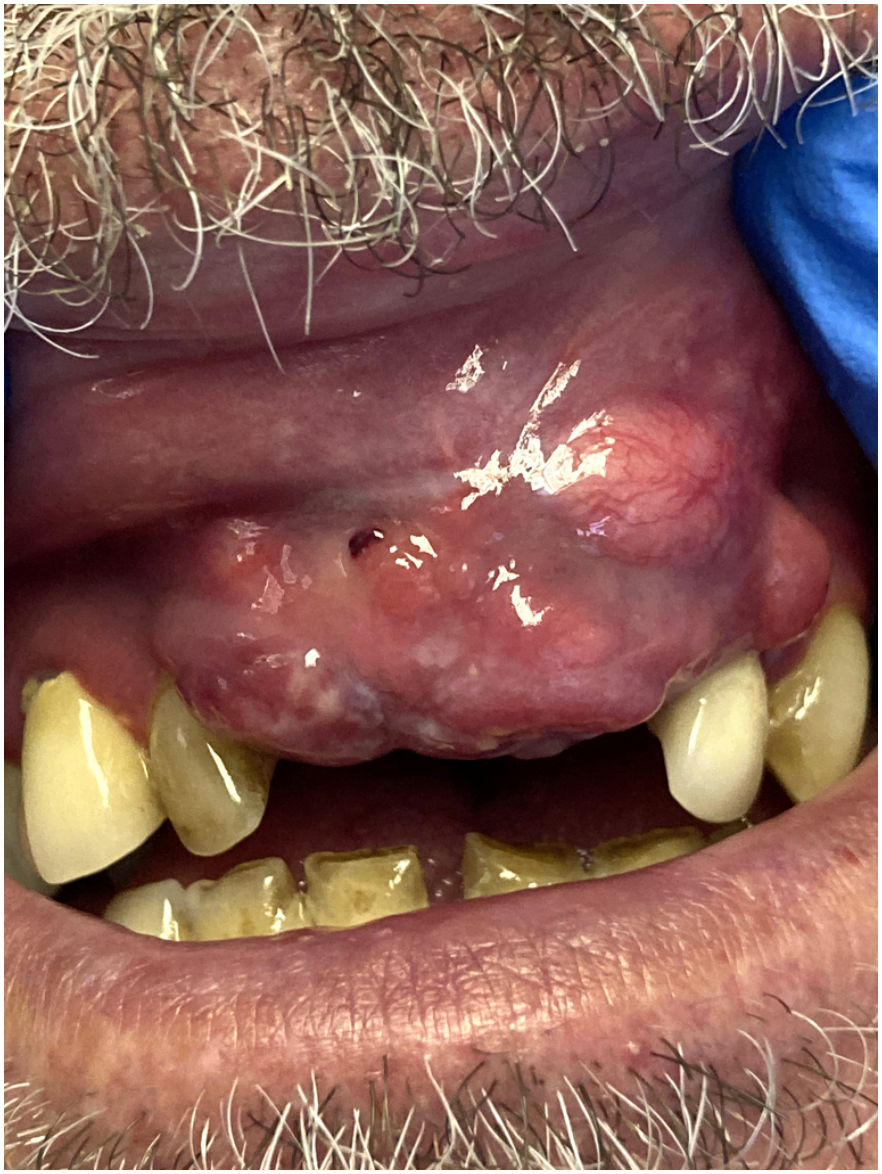

Figure 1. Exophytic lesion upper anterior maxilla and upper labial mucosa

WHAT IS YOUR DIAGNOSIS?

Based on the patient's history and physical examination, which one of the following is the most suspicious diagnosis?

1. Idiopathic gingival enlargement
2. Peripheral giant cell granuloma
3. Plasmablastic lymphoma
4. Pyogenic granuloma

DIAGNOSIS IMAGE

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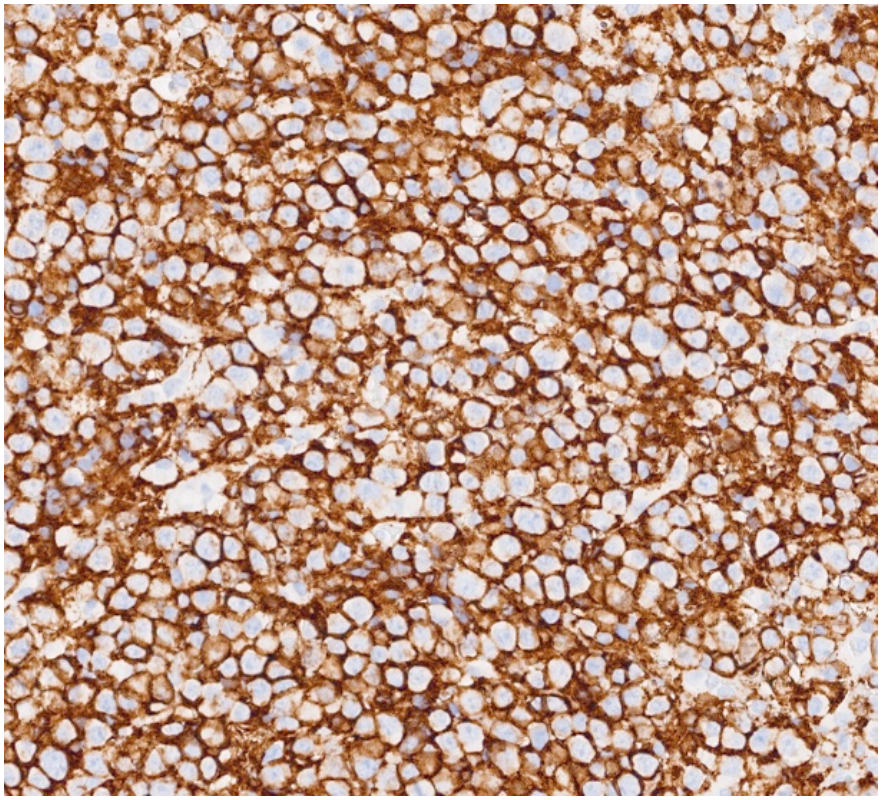

Figure 2a – Immunohistochemistry positive for CD 138- a plasma cell marker

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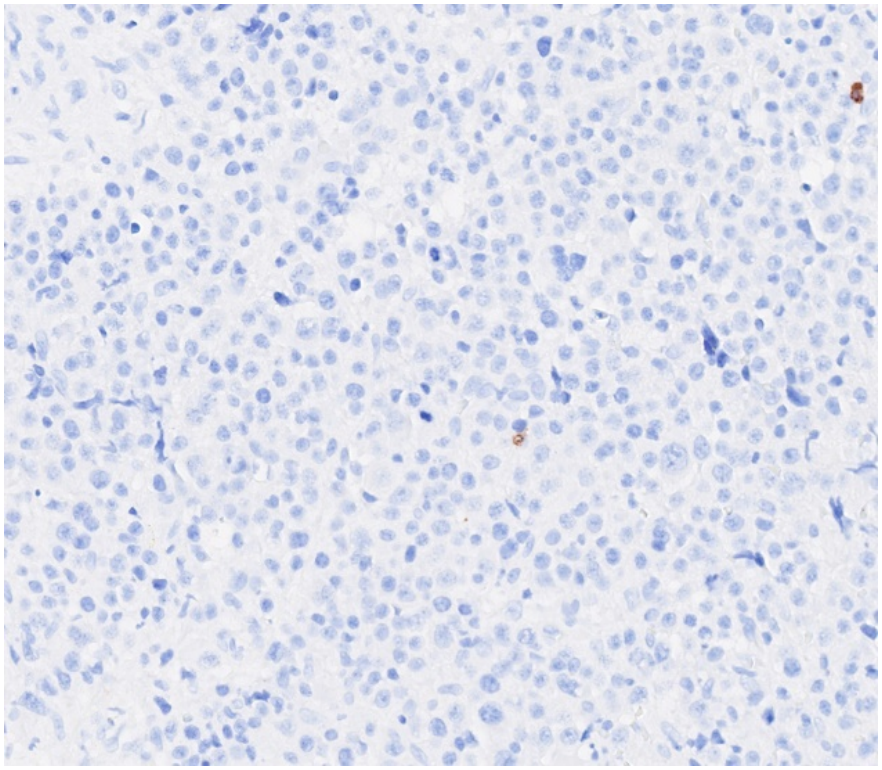

Figure 2b – Negative immunohistochemistry for CD 20 – a B- cell marker

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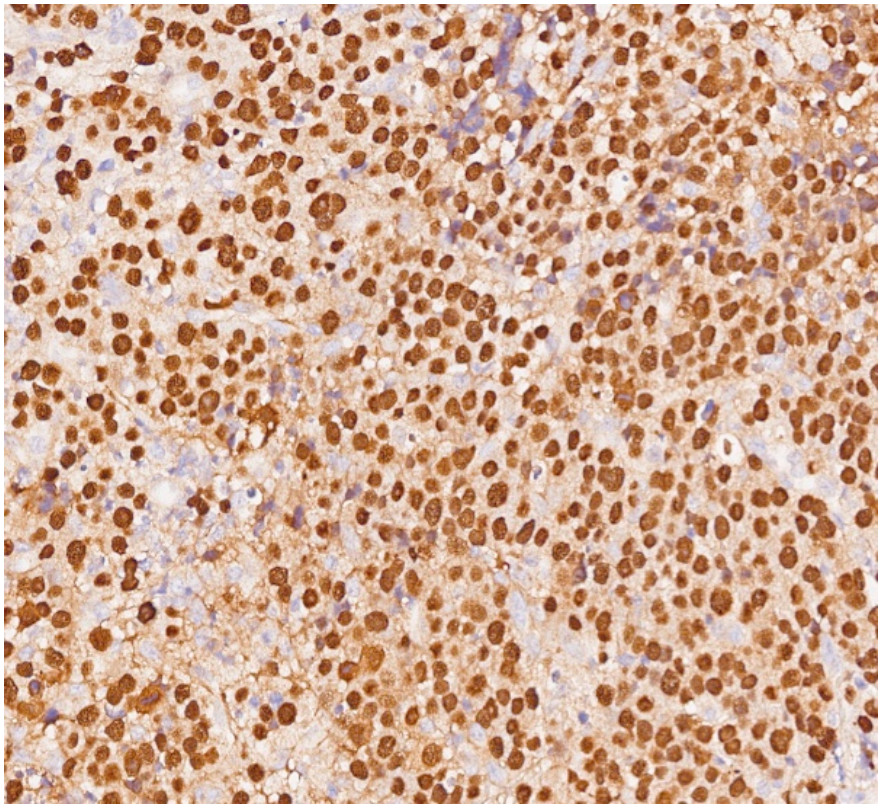

Figure 2c – EBER ISH – Epstein Barr virus encoded RNA in-situ hybridisation positive

DIAGNOSIS

The correct diagnosis is C, Plasmablastic lymphoma (PBL). An incisional biopsy was undertaken and demonstrated extensive infiltration of the lamina propria with sheets of neoplastic plamablasts. Immunohistochemistry was positive for CD 138 and MUM 1 which are plasma cell markers and negative for CD 20, a mature B cell marker (Figures 2a and 2b). There was also marked positivity for Epstein-Barr virus-encoded RNA in the sample (Figure 2c). These investigations confirmed the diagnosis as Epstein Barr Virus-positive plasmablastic lymphoma, consistent with viral-induced immunosuppression

Plasmblastic lymphoma is a rare but aggressive subtype of diffuse large B-cell lymphoma (Non-Hodgkin lymphoma). It is estimated that PBL comprises 2% of HIV-related lymphoma cases. It has a male predominance (3:1), with a median age of diagnosis in HIV-positive patients of 42 years. It is strongly associated with immunodeficiency with 79 % of cases having a concomitant HIV infection and 75% having an associated EBV infection (Rodrigues-Fernandes et al., 2018). The Plasmablast is the precursor of the plasma cell and it is proposed that EBV leads to the prevention of apoptosis of these cells (Castillo et al., 2015).

The most notable feature of plasmablastic lymphoma is its predilection for the oral cavity with 66% cases presenting here. (Rodrigues-Fernandes et al., 2018) It most commonly presents as an expanding mass lesion on the gingiva or palate. Patients can also present with B symptoms: fevers, weight loss and night sweats in up to 40% of cases, however lymph node involvement is less frequently seen in these patients. (Lopez and Abrisqueta, 2018). Currently available chemotherapy fails to achieve good results and the prognosis of patients with PBL is generally poor with a median overall survival of 5–15 months (Castillo et al., 2015).

OUTCOME

The patient was referred to Haematology where he had a PET-CT scan which showed subtle uptake in the maxilla and no further uptake seen elsewhere. He is currently undergoing chemotherapy.

CONFLICT OF INTEREST

All authors have no conflicts of interest to disclose

AUTHOR CONTRIBUTIONS

Ryan McConville

Amanda Mary Willis

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