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Mandibular bony solitary plasmacytoma: a misleading case

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TITLE PAGE

Mandibular bony solitary plasmacytoma: a misleading case

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MANUSCRIPT

Key clinical message

Mandibular solitary bone plasmacytoma is a rare diagnosis, but the primary oral manifestation of a haemopathy should be considered in the face of any oral ulceration “raspberry-like”

CASE HISTORY

A 78-year-old woman was referred for an asymptomatic right mandibular lesion appeared three months ago, with no general health impairment. Her medical history included dyslipidemia and arterial hypertension, diseases stabilized by conventional treatment.

The lesion was located in an edentulous area, from the first premolar to the retromolar trigone. Presenting as heterogeneous, erythematous, and exophytic, with a central ulceration and contact bleeding. The tongue remained mobile, with no adenopathy or involvement of the inferior alveolar nerve. (Figure 1)

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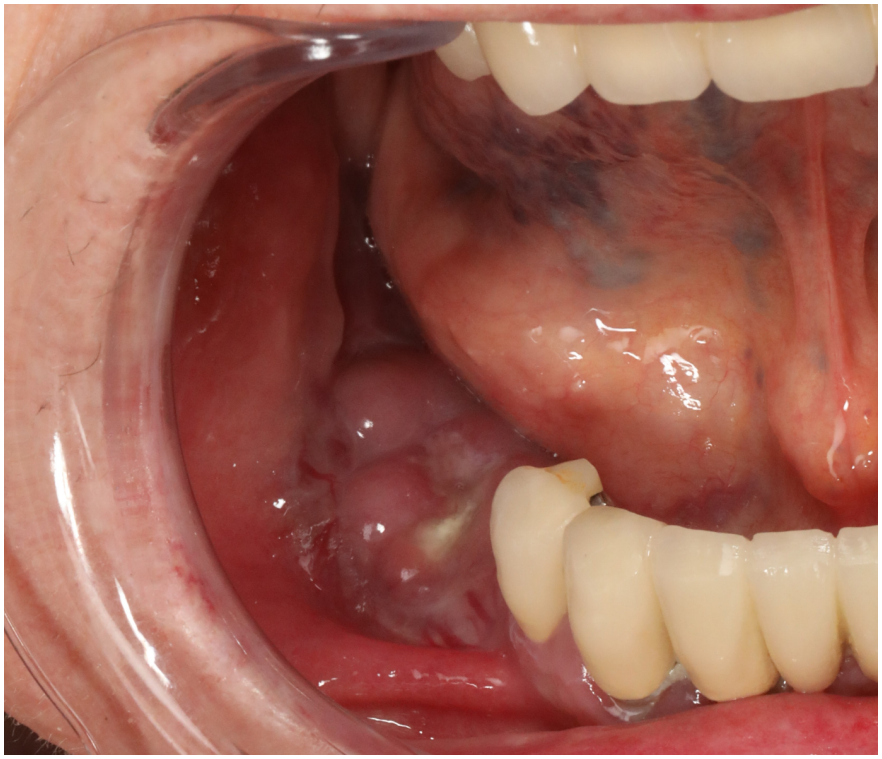

Figure 1 : view of the mandibular lesion, “raspberry-like”.

INVESTIGATIONS

Three-dimensional radiographic imaging revealed significant bone involvement with mandibular bone lysis. The bone appears mutilated but there is no nerve damage. (Figure 2)

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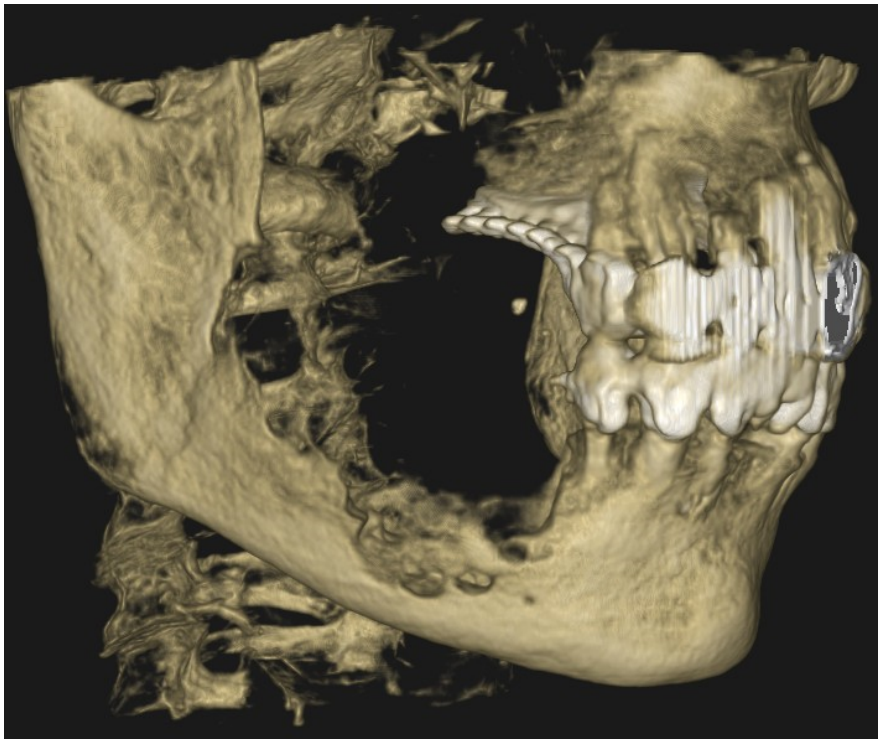

Figure 2 : CBCT showing bone damage with this mitted bone appearance

However, biopsy revealed a monotypic lambda plasma cell infiltration consistent with a plasmacytoma. Ki67 proliferation index shows a proliferation index of 20%. Complementary investigations showed no systemic involvement, leading to the definitive diagnosis of bone solitary mandibular plasmacytoma. The PET scan shows intense hypermetabolism of the lesion, with no other systemic damage. Next-generation high-throughput sequencing shows no anomalies

Management included five sessions of radiotherapy and chemotherapy with daratumumab, dexamethasone, and lenalidomide, as decided by the oncology team.

For the past 6 months, the lesion has remained asymptomatic, reduced in size at bone level. However, the patient presents with mucositis due to radiotherapy. Biological tests remain normal.

DISCUSSION

Solitary plasmacytoma of bone accounts for 5% of plasma cell tumors. Solitary plasmacytoma has a predisposition for the red marrow-containing axial skeleton and is most frequently seen in the thoracic vertebrae, followed by the ribs, sternum, clavicle, or scapula. Mandibular localization remains rare.(1) Radiotherapy remains the treatment of choice, but radiation-related drawbacks are fairly frequent, which is why chemotherapy is also of interest. The risk of progression to multiple myeloma despite irradiation is 50% at 5 years. Regular and rigorous follow-up is therefore vital. (2,3)

FUNDING INFORMATION

None.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

CONSENT

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I confirm that written patient consent has been signed and collected in accordance with the journal's patient consent policy, and that I will retain the original written consent form and provide it to the Publisher if requested

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Cyril Debortoli : Conceptualization ; Investigation ; Writing - original draft ; Writing - review & editing

Sarah Latreche : Methodology ; Validation ; Visualization

Olina Rios : Methodology ; Validation ; Visualization

Charles Savoldelli : Methodology ; Supervision ; Validation