A lower lip mass.

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1. Case presentation

A 63-year-old man without significant medical history presented to the Department of Oral and Maxillofacial surgery with a 2-year history of a painless slow-growing mass in the right lower lip. There was no bleeding and no infection. The patient had no history of trauma in that region.

Examination revealed a 2 cm well-defined submucosal mobile mass, with a yellowish appearance and hard consistency in the right lower lip (Fig. 1).

Because the mass presented a very hard consistency during the biopsy, a radiography with periapical film of the lower lip was performed, showing irregular and radiopaque structures (Fig. 2). No additional lesions were noted and no cervical lymph nodes were palpable

The lesion was completely excised under general anesthesia. The mass was well encapsulated and not attached to any adjacent structures. The resected specimen consisted of a multilobulated yellow mass, with soft and hard tissue on palpation, measuring 2,1 x 2,4 x 1,3 cm.

What is your diagnosis?

2. Discussion

Histopathological examination revealed abundant mature adipose tissue with several bone structures, with no atypia. Bone structures consisted of well-differentiated bone trabeculae centered on loose fibro-vascular tissue suggestive of bone marrow (Fig. 3). Around these bone structures, a fibro-cellular border was found. The lesion was diagnosed as « osteolipoma ».

Differential diagnosis for a painless lip nodule includes mucocele, nodular fibrous hyperplasia, salivary gland tumor, pyogenic granuloma, lymphoma, Kaposi sarcoma or squamous cell carcinoma [1].

Lipomas are the most common soft-tissue tumor of adulthood and represent 1-4% of tumors of the oral cavity. Histologic variants of lipoma are described on the basis of the predominant type of lesional tissue, including angiolipoma, fibrolipoma, myolipoma, myxolipoma leiomyolipoma, spindle cell lipoma, chondrolipoma, sialolipoma and osteolipoma [2].

Osteolipoma is a rare histologic variant among oral lipomas, accounting for less than 1% of cases described in the literature [3]. It is characterized by the scattering of the lamellar bone trabeculae among proliferating mature fat cells [4].

Twenty-two cases have been described in the head and neck region and only thirteen in the oral cavity. We describe here the first case of osteolipoma in the lip.

The pathogenesis of osteolipoma is not clear. Multiple causes such as adipose and osseous proliferation from pluripotent mesenchymal stem cells, metaplasia of fibroblasts within a lipoma, osteo-inducing factors released in a lipoma by blood-born monocytes and microtrauma and/or mechanical stress in a long-standing lipoma, resulting in ischemia and subsequent calcification have been suggested [5].

The prognosis is excellent and surgical excision is the recommended treatment [3]. Recurrence or malignant transformation has not been reported in oral and maxillofacial region.

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Conflict of interest

The authors declare that there are no conflicts of interest in regard to this work.

Data presentation

This article was not submitted to or published in any other journal previously. This case was presented during the 54rd french oral and maxillofacial society congress from 3 to 6 october 2018 in Marseille.

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Figure legends

Figure 1. Clinical aspects: 2 cm well-defined, mobile submucosal mass showing yellowish appearance and hard consistency in the right lower lip.

Figure 2. Radiographic aspects: spherical radiopacity with an irregular pattern of trabeculae

Figure 3. Histopathologic features [H&E 5x]: abundant mature adipose tissue with well-differentiated bone trabeculae centered on loose fibro-vascular tissue suggestive of bone marrow.