

Chondrolipoma Arising in the Floor of the Mouth and Review of the Literature: A Case Report

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Abstract

Only 14 cases of chondrolipoma, a benign mesenchymal tumor containing mature cartilage and adipose tissue, have been reported from the oral cavity with tongue as the most common location. This case report describes a 56-year-old male with an asymptomatic mass in the floor of the mouth, which had doubled in size during the previous 6 months. This report is the first reported case of chondrolipoma arising in the floor of the mouth.

Keywords: Chondrolipoma; Floor of the mouth; Benign mesenchymal tumor

Introduction

Lipoma, a benign mesenchymal tumor, occurs commonly on the trunk and extremities and infrequently in the oral cavity, presenting as soft, nodular masses in the buccal mucosa, buccal vestibule, tongue and floor of the mouth in both sexes with a median age of 40 years [1].

Rarely, lipomas containing cartilage have been reported in the tongue and lip [2]. These include chondrolipoma and chondroid lipoma. Chondrolipomas are defined as benign tumors containing mature cartilage and adipose tissue while chondroid lipoma contains immature cartilage. We report a chondrolipoma occurring in the anterior floor of the mouth, a site not previously described.

Case Report

A 56-year-old Caucasian male presented with an asymptomatic mass in the floor of the mouth, which had doubled in size during the previous 6 months. Past medical history was positive for hypothyroidism treated with synthroid. He was a



Figure 1. Intraoral photograph showing a well-defined mass (1) in the anterior floor of the mouth.



Figure 2. Intraoral photograph demonstrating healing area post excision (1).

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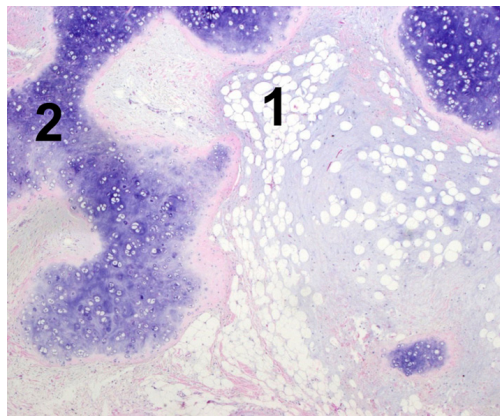


Figure 3. Histology showing lobules of adipose tissue (1) and mature cartilage (2) in a fibrous connective tissue stroma (hematoxylin-eosin stain × 2).

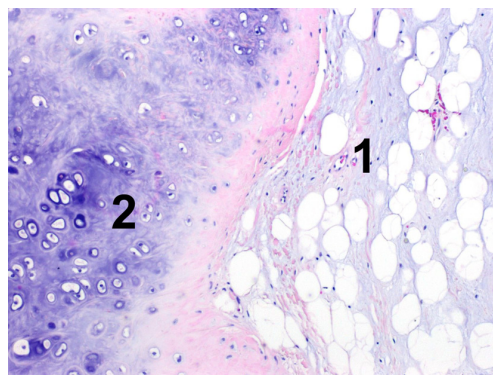


Figure 4. Histology showing lobules of adipose tissue (1) and mature cartilage (2) (hematoxylin-eosin stain × 10).

half pack-a-day smoker.

On oral examination, a rubbery mass 2.0 × 1.5 cm was noted in the anterior floor of the mouth (Fig. 1). Bilateral mandibular tori were also present. The clinical differential diagnosis included dermoid cyst and soft tissue tumors. An excisional biopsy was performed without complication. The area healed uneventfully (Fig. 2).

The tan, soft tissue nodule was 1.5 × 1.3 × 1.0 cm with a glistening, white sectioned surface. Histologically, a well-

circumscribed benign tumor composed of lobules of mature adipose tissue and mature hyaline cartilage separated by fibrous connective tissue in a fibromyxoid stroma was observed (Fig. 3, 4). The histological features were characteristic of chondrolipoma.

Discussion

Chondrolipoma is a rare, benign tumor occurring at any age. A literature review of reported chondrolipomas revealed 10

Table 1. Review of Clinical Features of the Reported Cases of Oral Chondrolipomas

Author	Location	Gender	Age in years
Pitman and Bell [2]	Masseter	Female	51
Berg and Gorsky [3]	Tongue	Male	69
Bezerra et al [4]	Tongue	Female	68
Goel et al [5]	Tongue	Female	36
Hietnen and Makinen [6]	Tongue	Female	68
Maes and Eulderink [7]	Tongue	Male	47
Nonaka et al [8]	Tongue	Male	30
Shabbir and Greenwood [9]	Tongue	Male	71
Allard et al [10]	Lower lip	Female	69
McAndrew and Greenspan [11]	Lower lip	Male	72
Fujimura and Enomoto [12]	Tongue	Male	56
Szudrowicz and Jakobi-Roz [13]	Lower lip	Male	52
Batchvarova et al [14]	Tongue	Male	14
Current case	Floor of mouth	Male	56

cases in the tongue, three in the lip and one in the masseter [2-14] (Table 1). The present lesion is the first arising in the floor of the mouth. Nine cases including the present case occurred in males with an average age of 51 years. All lesions were excised and without recurrence. One case of chondrolipoma of the tongue in a two year old female is reported in the Spanish literature [8].

The differential diagnosis of floor of the mouth nodules/masses is dependent upon the location and consistency of the lesion. Ranula occurs commonly in the floor of the mouth, less commonly salivary gland tumors, dermoid cysts and mesenchymal tumors. The benign mesenchymal tumors include lipoma, neurofibroma and hemangioma. Dermoid cysts are uncommon true cysts, occurring in the midline of the floor of the mouth.

Conclusion

An unusual case of chondrolipoma clinically presenting as a red, rubbery mass in the floor of the mouth is reported. The demographics of all cases reported as chondrolipoma from the English literature are presented. The differential diagnosis of nodules/masses in the floor of the mouth is discussed.

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