Lipoma in the floor of mouth: report of a rare case

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Abstract

Introduction
Lipoma is a common benign soft-tissue neoplasm of mature adipose tissue. Most of the lipomas develop in the subcutaneous tissue, but deeper tissues may be involved as well. The oral cavity is not commonly affected with a prevalence rate of 1–4% of all benign oral lesions. Half of oral lipomas are in the cheek, and the remainders were found in the tongue, floor of the mouth, lips, palate and gingiva. Oral lipoma can occur in various anatomic sites; although benign in nature, their progressive growth may cause interference with speech and mastication due to the tumour’s dimension. Here we are describing a case of a 50-year-old female who presented with intraoral swelling located beneath the anterior one-third of the tongue which had been present for 1 month, not associated with pain, problem in speaking or swallowing.

Case Report
The clinical examination revealed a mobile mass measuring about 2 × 2 cm located in the anterior third of the floor of the mouth. The overlying mucosa was normal in appearance with no sign of inflammation. On palpation, the lesion was not tender. The lesion was surgically excised under local anaesthesia. Histologically, sections showed sheets of mature adipocytes and lobules of adipose tissue separated from the surface epithelium by fibrous connective tissue stroma, and finally diagnosis of lipoma in the floor of the mouth was made which is a rare location.

Conclusion
This case demonstrates the heterogeneity in presentation of lipoma at unusual sites.

Introduction
Lipomas are common benign soft-tissue neoplasms of mature adipose tissue in the human body, but are less frequent in the oral cavity. The peak of incidence is usually in the fifth or sixth decade of life, while occurrence in children is very uncommon. Multiple presentations may occur in about 5% of patients. The overall incidence in the oral cavity is between 1% and 4.4% of all benign oral lesions. Oral lipomas can occur in various anatomic sites including the major salivary glands, buccal mucosa, lip, tongues, palate, vestibule and floor of the mouth. They are benign mesenchymal neoplasms composed of fat cells usually surrounded by a thin fibrous capsule. They are commonly present as slow-growing asymptomatic lesions with a characteristic yellowish colour and soft in consistency with a doughy feeling. Although benign in nature, their continuous growth may cause interference with speech and mastication due to tumour dimensions. Malignant counterpart, that is, liposarcoma, is rare in oral cavity.

The present report shows a case of 50-year-old female who presented with a lipoma in the floor of the mouth.

Case Report
A 50-year-old female patient reported with the complaints of swelling/growth in the floor of the mouth beneath the anterior one-third of the tongue which had been present for 1 month, not associated with pain, problem in speaking or swallowing. There was no relevant past and family medical history. The clinical examination revealed a mobile 2 × 2 cm in size mass located on the anterior one-third of the floor of the mouth (Figure 1). The overlying mucosa was normal

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Figure 1: Gross appearance of lipoma measuring 2 × 2 cm in size. The mass is encapsulated.
cells were arranged in lobules. These lobules were separated from each other by fibrovascular connective tissue septae. A histopathological diagnosis of lipoma was made.

Discussion
Lipomas develop mostly in the subcutaneous tissues and only rarely in deep tissues. They most commonly involve the trunk and limbs of the body, and seldom the oral and maxillofacial region. The occurrence is higher in females than in males. Superficial lipomas in the oral and maxillofacial region sometimes can be clinically diagnosed. Palpation reveals a soft, painless and mobile mass, which gradually enlarges over the course of several months or years. Usually, deep lipomas are not palpable. They present as slow-growing asymptomatic lesions with yellowish colour and a soft, doughy feel. Other connective tissue lesions such as granular cell tumour; neurofibroma, traumatic fibroma and salivary gland lesions (mucocele and mixed tumour) might be included in the differential diagnosis.

The clinical differential diagnosis includes ranula, dermoid cyst, thyroglossal duct cyst, ectopic thyroid tissue, pleomorphic adenoma and mucoepidermoid carcinoma, angiolipoma, fibrolipoma and malignant lymphoma. The definitive diagnosis is made by means of microscopic examination which shows adult fat tissue cells embedded in the stroma of connective tissue and surrounded by a fibrous capsule. A histopathological differential diagnosis appropriate to the oral cavity would include fibrosarcoma if spindle cells are not localised and are numerous. Other lesions should be also considered: they include schwannoma, myxoid neurofibroma, leiomyoma, nodular fasciitis, myxolipoma, fibrolipoma, malignant fibrous histiocytoma, myxoid liposarcoma and myxoid solitary fibrous tumour. The prognosis of this tumour is always in appearance with no sign of inflammation. On palpation, lesion was non-tender. The lesion was surgically excised under local anaesthesia. Upon formalin fixation and paraffin embedding sections were treated with haematoxylin and eosin stain. Sections showed sheets of mature adipocytes and lobules of adipose tissue separated from the surface epithelium by fibrous connective tissue stroma (Figures 2 and 3). Tumour

Figure 2: Low-power appearance of lipoma. Tumour is composed of mature adipose tissue separated by thin fibrovascular septa (haematoxylin and eosin × 400).

Figure 3: High-power appearance of lipoma. Sections show sheets of mature adipocytes (haematoxylin and eosin × 1000).
good⁹. Surgical excision is the main treatment. Recurrence is reduced by wide surgical excision¹⁴. Infiltrating lipomas are difficult to extirpate and are liable to recurrence²⁻⁴.

**Conclusion**
This above case of lipoma presented at a very unusual site, that is, on the floor of the mouth. The overall incidence in the oral cavity is between 1 and 4.4% of all benign oral lesions. The above case demonstrates the heterogeneity in presentation of lipoma at unusual sites.

**Consent**
Written informed consent was obtained from the patient for publication of this case report and accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal.

**References**

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