

Angiolipoma- A Rare Case Scenario

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Correspondence Author: Dr.Krishna Shekhar Reddy, M. D. S., Saveetha Dental College And Hospitals, Velappanchavadi, Chennai, Tamil Nadu , India**Type of Publication:** Original Research Paper**Conflicts of Interest:** Nil**Abstract**

Angiolipoma, a subtype of lipoma, is a rare benign mesenchymal tumor. It is common in the extremities with rare occurrence in the oral cavity. In this case report, we present a case of non infiltrating type of angiolipoma present in the buccal mucosa which was surgically excised under local anaesthesia and the specimen was histopathologically examined. The histopathological examination revealed mature adipocytes arranged in sheets separated by thin fibrous connective tissue with interspersed vessels.

Introduction

A mesenchymal tumor of benign origin composed primarily of mature adipocytes is known as Lipoma¹⁰. The surrounding tissues are separated by a thin fibrous capsule. Based on their histopathologic appearance they are subclassified into Angiolipoma, spindle cell lipoma, myelolipoma, chondrolipoma and myxolipoma which are some of the logical variants of lipoma^{10,11}.

Histopathologically when adipose tissues are intermingled with vascular components, they are known as Angiolipoma, a subtype of lipoma¹. The tumor occurs commonly in the trunk and extremities, especially in the forearm with very rare occurrence in the soft tissue of the oral region. It is further classified into infiltrating and non-infiltrating type of angiolipoma¹⁻¹⁰.

In this report, a rare case presentation on clinical, macroscopical and histopathological features of angiolipoma excised from the cheek is discussed.

Case Report

A 63 year old male patient reported to the department of oral medicine with the chief complaint of painless swelling in his left side cheek region for past 6 months which was smaller in size and gradually increased to the present size following a traumatic injury. On general examination, the patient is hypertensive and under medication for past 2 years. Physical examination showed a good physique and nutritional status, with no abnormalities in the trunk and extremities.

A head and neck extra oral examination showed a symmetrical facial configuration, no abnormal sensation or motor palsy of the cheek, and no significant cervical lymphnode enlargement.

On intraoral examination(Fig 1) revealed a solitary, well defined, amber colored sessile lobulated growth roughly measuring approximately about 3 × 2cm in dimension with dispersed whitish areas evident in the left buccal mucosa along the occlusal plane level and not attached to the underlying tissue. Extending approximately 3 cm away from the commisure of lip anteriorly, and 5 cm away from the retromolar region posteriorly, supero-inferiorly 3 cm away from buccal upper and lower vestibule in relation to 26 and 36 tooth region respectively. The surrounding

mucosa appears normal. The growth was soft in consistency, non tender on palpation and no secondary changes evident.

Based on the patient's history and clinical examination the provisional diagnosis of traumatic fibroma was given, along with a differential diagnosis of mucocele, fibroepithelial polyp, hemangioma, lipoma, granulofibroma, solitary fibrous tumor.

On clinical diagnosis the growth in the buccal mucosa, was surgically excised under local anaesthesia. Since the mass was surrounded by a thin capsule and was not adherent to the surrounding tissue, detachment was easy and the mass was removed as a lump.

Microscopically,(Fig 4) the mass presented with an epithelium and connective tissue. The epithelium was hyperplastic with exhibiting features like basilar hyperplasia, acanthosis and hyperparakeratosis. The underlying connective tissue showed larger vascular spaces lined by thin endothelium and engorged with RBC's and in some areas mature adipocytes are interspersed with vessels. There is also evidence of capillary sized vessels, few chronic inflammatory cells, extravasated RBC's and muscle fibres. And histopathological diagnosis was given as Angiolipoma of left buccal mucosa.

Discussion

Bowen in 1912 reported with the first case of Angiolipoma a subtype of lipoma¹. Angiolipomas commonly occur below the surface of the skin in the extremities, abdomen, chest and back, and especially in the forearms and tend to be multiple^{2,3}. Angiolipomas can occur at any age, but are relatively common in adolescence and the twenties^{2,3}. Angiolipomas consist of mature adipocytes and proliferating vascular endothelial cells and are into a non-infiltrating type with a capsule and an infiltrating type based on histological presentation^{2,3}.

The aetiology of lipoma is still a mystery. However, in literature, trauma is also mentioned as one of aetiological factors⁸. There are two different opinions about the occurrence of so called traumatic lipomas. The first is that, after trauma, adipose tissue prolapses through fascia, resulting in lipoma formation⁹. Angiolipoma in the oral cavity was first reported by Davis et al.⁴ as a tumor occurring in the hard palate. To our knowledge, there are only 22 cases of Angiolipoma in oral soft tissues⁴⁻²² including our case; therefore, such cases are extremely rare. The 22 patients comprised 12 males and 10 females; i.e., the incidence in males is slightly higher. The age at the first consultation ranged from 1 to 81 years old and the mean age was 32.1 years old. The mean disease period was about 3 years and 2 months, and consequently the mean onset age was assumed to be about 29 years old. This onset age does not differ significantly from that of 21 to 24 years old found in cases of systemic Angiolipoma^{2,3}. Compared with other common lipomas in the oral cavity, which have a mean onset age of 51.9 – 60.2 years old²³⁻²⁵. Angiolipomas in soft tissues appear to occur in younger individuals. This may be because vascular components grow more rapidly than lipoma tissues.

Out of all the 21 cases the chief complaint were a mass or a swelling and 6 cases were associated with tenderness. The overlying skin or mucosa appears yellow /pink colour. In contrast Angiolipoma in the oral cavity was not associated with family history or multiple onset

References

- [1]. Bowen JT. Multiple subcutaneous hemangiomas, together with multiple lipomas, occurring in enormous numbers in an otherwise healthy, muscular subject. *Am J Med Sci* 1912;144:189-92.
- [2]. Howard WR, Helwig EB. Angiolipoma. *Arch Dermatol* 1960;82:924-31.

- [3]. Lin JJ, Lin F. Two entities in angioliopoma. A study of 459 cases of lipoma with review of literature on infiltrating angioliopoma. *Cancer* 1974;34:720-7.
- [4]. Davis GB, Stoelinga PJ, Tideman H, Bronkhorst F. Angioliopoma of the hard palate: a case report and review of the literature. *J Maxillofacial Surg* 1976;4:242-4.
- [5]. Flaggert 3rd JJ, Heldt LV, Keaton WM. Angioliopoma of the palate. Report of a case. *Oral Surg Oral Med Oral Pathol* 1986;61:333-6.
- [6]. Puig I, Moreno A, de Moragas JM. Infiltrating angioliopoma: report of two cases and review of the literature. *J Dermatol Surg Oncol* 1986;12:617-9.
- [7]. Epivatianos A, Markopoulos AK, Papanayotou P. Benign tumors of adipose tissue of the oral cavity: a clinicopathologic study of 13 cases. *J Oral Maxillofacial Surg* 2000;58:1113-7.
- [8]. Fregnani ER, Pires FR, Falzoni R, Lopes MA, Vargas PA. Lipomas of the oral cavity: clinical findings, histological classification and proliferative activity of 46 cases. *Int J Oral Maxillofac Surg* 2003;32:49-53.
- [9]. Furlong MA, Fanburg-Smith JC, Childers EL. Lipoma of the oral and maxillofacial region: site and subclassification of 125 cases. *Oral Surg Oral Med Oral Pathol Oral Radiol Endo* 2004;98:441-50.
- [10]. Auo HJ, Kang JM. Infiltrating angioliopoma of the nasopharynx: adjacent to an aberrant internal carotid artery. *Auris Nasus Larynx* 2009;36:247-50.
- [11]. Regezi JA, Sciubba J. Oral pathology: clinicalpathologic correlations. 2nd edn. Philadelphia: WB Saunders, 1993:235-7.
- [12]. Williams TP, Stewart JCB. Soft tissue cysts and benign neoplasms. In: Fonseca RJ. ed Oral and Maxillofacial surgery. Philadelphia: WB Saunders, 2000:127-51.

Figure

Figure 1: Extra oral photograph of the patient showing no gross facial asymmetry.



Figure 2 : The single, sessile, well defined lobulated amber colored intra oral growth.



Figure 3 : The excised specimen.



Figure 4 : The histopathological page showing mature adipocytes arranged in sheets separated by thin fibrous connective tissue with interspersed vessels.

