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Case Report

A Clinical Case Management of a Rare Entity- Intraoral Lipoma

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Abstract

Lipomas are rare in oral and maxillofacial regions although they are the most common tumors of mesenchymal origin in the human body. However, its occurrence in oral cavity is very rare it accounts for 1 to 4% of benign neoplasms of mouth affecting predominantly the buccal mucosa, floor of mouth and tongue. They slowly enlarge and they are known to grow to large sizes, thus causing mastication and speech difficulties. We report a case of 63-year-old female patient with intraoral lipoma in buccal vestibule in which surgical excision was done under local anesthesia.

Keywords: Benign Neoplasms; Lipoma; Mesenchymal Tumors

Introduction

Lipoma is the most common soft tissue mesenchymal neoplasms, with 15-20% of cases involving the head and neck region and only 1-4% affecting the oral cavity. Even though lipomas are common in head and neck region, intraoral lipomas are rare entity. The pathogenesis of lipoma is uncertain, but they appear to be more common in obese people. The first description of an oral lesion was provided in 1848 by Roux in a review of alveolar masses, where he referred to it as "yellow epulis'. In this case report we present an intraoral swelling present in the left buccal mucosa. Clinicians must be able to diagnose properly and provide appropriate treatment, thus improving the patient compliance.

Case Report

This was a case report of a 63-year-old female patient who presented to the Department of Oral Medicine and Radiology with the chief complaint of a painless swelling in the lower left cheek region for 2 years. Growth was initially small and has grown to the present size. The growth did not interfere with mastication or speech. There was no history of trauma or fever and no relevant family history. Medical history revealed surgical excision of lipoma in the mastoid region 4 years back .She also gave a history of hyperlipidaemia and was under medication. Past dental history included extraction of 46, two months back due to pulpal involvement. On general examination, the patient was of moderate built and height with no obvious facial asymmetry. On intraoral examination 1x0.75cm sessile mass was seen on the left buccal mucosa in relation to 38 region. Colour of the swelling had a yellowish hue. Surface was smooth with no visible ulceration or bleeding. On palpation it was nontender, firm in consistency and noncompressible and slip sign was positive. The swelling was non-pulsatile and based on the above findings a provisional diagnosis of lipoma was given (Figure 1).

Figure 1: Intraoral Lipoma.

In this case we gave a differential diagnosis of traumatic fibroma and mucocele. Mucocele was excluded as the lesion was not blue in colour and it was not cystic-like on palpation. Furthermore, traumatic fibroma was given as differential since the patient had decayed fractured tooth which was extracted 1 year back but the swelling in this case had a yellowish hue which was more likely to be Lipoma (Figure 2).

Figure 2: Excused specimen.

Swelling was surgically excised using the Bard Parker no 15 blade and the biopsy was sent for histopathological examination. On Histopathologic examination of H and E-stained slides, using light microscope, a well-circumscribed nodular mass was seen. A distinct lobular pattern composed of mature adipocytes; cells with large clear cytoplasm and a flat dark nucleus on periphery were seen. Thin septa of fibrous tissue were seen between the closely packed normal looking fat cells. At the borders, a thin fibrous capsule surrounded lesion. According to histopathology features, a definitive diagnosis of lipoma was made (Figure 3).

Figure 3: Histopathological view.

Patient was contacted after 3 months to assess the healing and any signs of recurrence; however, the patient reported complete healing of the site and no recurrence of the lipoma was seen. Patient was instructed to report back in case of any signs of regrowth in the surgical site.

Discussion

Lipomas are benign soft tissue neoplasms composed of mature white adipocytes which are relatively uncommon in the oral and maxillofacial region. Their overall incidence in the oral cavity is thought to be between 1% and 4% of all benign oral lesions [1].

The most common locations of lipoma in the oral cavity have been reported to be in the buccal mucosa, a region which has profuse amount of fatty tissue, followed by tongue. The hard palate has very little fatty tissue, so the incidence of lesion here is quite low [22]. The etiology of lipomas is uncertain, and the tumors mainly affect the region of the trunk, shoulders, neck, and axilla [3].

The aetiology of lipoma varies from differentiation of multipotent mesenchymal cells in fat tissue, cartilage, and bone to metaplasia of a pre-existing lipoma. Mesenchymal cells are modified by a systemic and local influence that range from local trauma to prolonged ischemia [4].

The pathogenesis of fibrolipoma remains unclear. It has been thought as congenital to be caused by endocrinal imbalance, to be the product of a degenerated fibromatous tumour, or to arise from maturation of lipoblastomatosis [5].

The clinical features of lipoma's vary according to their rate of growth, size, and location. The usual complaint is of a painless palpable mass, and there is seldom dysfunction of an involved muscle. A characteristic feature is a change in consistency and form of many of these lesions during contraction of involved muscle. The tumor is soft and flat when the muscle is relaxed and becomes firm and more spherical when muscle contracts [1,6].

Occasionally, the lipoma may invade muscles or grow between them: the so-called infiltrating lipoma. Infiltrating lipoma is an uncommon mesenchymal neoplasm that characteristically infiltrates adjacent tissues and tends to recur after excision. This type of lipoma is extremely rare in the head and neck region, and its congenital type is rare [4,7].

The clinical differential diagnosis includes ranula, dermoid cyst, epidermoid cyst, thyroglossal duct cyst, ectopic thyroid tissue, lymphoepithelial cysts. The ranula is usually seen in the floor of the

mouth and they are fluctuant swelling with clear fluid content. Oral dermoid and epidermoid cysts also present in the midline of the floor of the mouth, and they are submucous nodules. Although oral lymphoepithelial cysts present as yellow or yellow-white coloured painless submucosal movable nodules, they differ from oral lipomas in that they usually occur in the first three decades of life and they are small in size at the time of diagnosis. Even though thyroglossal duct cyst and ectopic thyroid tissue are painless movable mass; they usually appear on the posterior dorsal surface of the tongue unlike lipomas which are most seen on the buccal mucosa. The definitive diagnosis is made by means of microscopic examination which shows adult fat tissue cells embedded in a stroma of connective tissue and surrounded by a fibrous capsule [6,8].

Histologically lipomas have more subtypes as follows simple lipoma, lipoma with chondro-osseous metaplasia, chondroid lipoma, fibrolipoma, infiltrating lipoma, angiolipoma, myolipoma of soft tissue, angiomyolipoma, spindle cell/pleomorphic lipoma, myxolipoma, angiomyxolipoma, dendritic myxofibrolipoma, sialolipoma, congenital lipoma, hibernoma and atypical lipomatous tumour.

Lipomas in buccal mucosae occur more often in males. Simple lipoma is the most common histological pattern found, followed by spindle cell lipoma and then fibrolipoma [2,4,7].

Lipomas of the lips tend to occur more often on the lower lip than on the upper lip and a male predominance is associated with this disease. Spindle cell lipomas and their variants are the most common subtype [1].

In the submandibular region, there is a right-sided predominance. Simple lipoma and spindle cell lipoma occur equally in this region. Chondroid lipoma is occasionally reported [7].

Lipomas of the tongue occur in approximately in equal numbers in males and females. The simple lipoma is the most frequent subtype; sometimes, lipomas with cartilaginous metaplasia or poorly delineated within the tongue muscle (intramuscular lipoma) are reported. Spindle cell lipoma is the second variant. Lipomas of the palate can be registered in the hard and soft palates. Simple lipoma and spindle cell lipoma can be equally found in the palate. Finally, lipoma of the floor-of mouth shows male predominance. Simple lipoma and spindle cell lipoma are the most common variants [1,2,4,7].

Conclusion

Oral lipomas are relatively uncommon tumours predominantly affecting the buccal mucosa in 4th to 6th decade. The clinical course is usually asymptomatic until they get lager in size. Treatment remains conservative surgical excision irrespective of histopathological variants. Well encapsulated lipomas, easily shell out with no possibility of recurrence or damage to the surrounding structures.

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