

Extensive lipoma in chin region : A rare case report.

Abstract:

Lipomas are common soft tissue tumors, but occur infrequently in the oral and maxillofacial region. Incidence of oral lipomas are noted to be only 1 - 4.4% with common sites being buccal mucosa followed by lips, tongue and vestibule. In this paper we would like to report a rare case of an extensive lipoma in the chin region

Key words: Lipomas, adipose tissue, tumour

Introduction:

Lipoma is a slow growing, benign mesenchymal tumour related to mature adipose tissue.[1] It usually presents as a well-defined tumour and covered by thin fibrous capsule.[2] It can occur anywhere in the body, hence also known as universal tumour. However, the incidence of oral lipoma is only 1-4.4%.[3] Oral lipomas are commonly seen on the buccal mucosa followed by lips, tongue, palate, vestibule, floor of the mouth and retro molar regions.[4] The etiology is not clear with incidence commonly in the 4th and 5th decades of life.[5,6] These lesions are generally in the subcutaneous tissue and can rarely infiltrate the underlying muscles.[7] Here we report a rare case of an extensive lipoma in the chin region.

Case report:

A 46 years old male patient reported to the Department of Oral and Maxillofacial Surgery, with a chief complain of a painless swelling which was initially small and grew to the current size over a period of 18 months in the chin region. There was no history of trauma, numbness, paraesthesia or pus discharge from the swelling.(Figure 1)



Figure 1: Preoperative Extra Oral Photograph

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Examination revealed facial asymmetry due to the swelling in mental region more towards right side. Swelling was single, diffuse and measuring approximately 6*4 cm, obliterating the mento-labial sulcus on right side of the face. The surface of the swelling was smooth, with normal skin covering the lesion and no visible pulsations. On palpation the lesion was non tender, soft to firm in consistency with no local raise in temperature. Lesion was slightly compressible but not reduce able with overlying skin pinch ability present. Mouth-opening of the patient was well within normal limits and intra-oral examination revealed no significant abnormalities.

Fine needle aspiration attempted was non-productive. Orthopantomograph revealed no significant radiographic changes. Ultrasonography revealed evidence of a mixed echogenic mass in relation to right chin region. CT scan revealed a homogenous hypodense area with intact adjacent cortical bone and no evidence of discontinuity in the tissue out-plan. (Figure2)

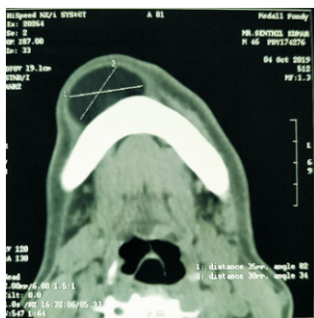


Figure 2: CT scan image of the lesion

Routine blood investigation was done and based on the history, clinical examination and radiological examination; a provisional diagnosis of lipoma was arrived at and planned for surgical excision under GA.

Under general anaesthesia, a horizontal incision was made on the inferior border of the lesion and blunt dissection was done to expose the lesion. The exposed lesion was then excised in toto. (Figure 3)



Figure 3: Specimen after excision

Layered skin closure was achieved after thorough irrigation with betadine and saline. The lesion was an encapsulated yellowish mass measuring 4*4*3.5 cm in its greatest diameter.

Histopathology report revealed lobules of adipose tissue covered by a well defined capsule which confirmed the diagnosis of lipoma. (Figure 4)

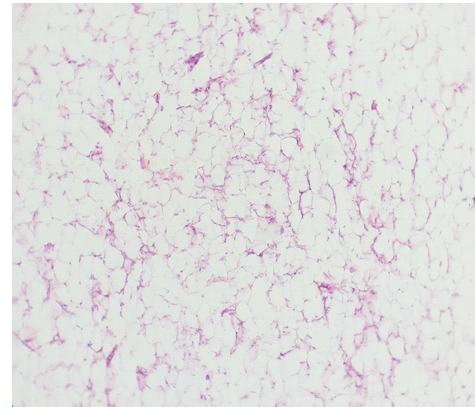


Figure 4: Histopathological Picture

Discussion:

Lipoma are uncommon oral neoplasm of mature adipose tissue. The first case of oral lipoma was described by Rouse in 1848, he named it as “yellow epulis”. [8] Most of the oral lipoma are solitary in nature only 5% cases reported as multiple lesions. [9,10,11,12] Multiple lesion are often associate with syndromes like fibromatosis, Gardner's syndrome, Dercun' disease, familial multiple lipomatosis or proteus syndrome [9].

The common sites of oral lipomas are oral mucosa (regions with high chances of fatty tissue) followed by tongue, lips, floor of the mouth, palate and gingiva [13] and rarely are intra osseous lipomas reported. [16,17] The etiology of oral lipomas are still unknown, but two theories try to explain the possible mechanism of lipoma: (i) “hypertrophy theory” stating that obesity and inadvertent growth of adipose tissue leads to the formation of lipoma, but fails to explain the lesions that occurs where there is no possible pre-existing adipose tissue [9] (ii) “metaplasia theory” stating that lipoma develops due to aberrant differentiation of mesenchymal cells

in lipoplasts.[16,17] the other possible etiology can be trauma, infection, chromosomal abnormality or hormonal imbalances.[16,18,19]

The male to female ratio for oral lipoma is 1:1.2[20] with incidence most commonly in the 4th and 5th decade of life.[3] Clinically they appears as an asymptomatic slow growing soft solitary mass with yellowish hue when it present in the submucosal region[1] and based on its location, it can also cause symptoms like difficulty in mastication and speech problems when it presents in the tongue or floor of the mouth region.

The differential diagnosis of such lesions can be oral dermoid / epidermoid cysts , oral lypho-epithelial cyst, benign salivary gland tumours, mucocele , benign mesenchymal neoplasm, ranula, ectopic thyroid tissue and lymphoma.[23]

The size of the lesion variesand generally depends on the location of the lesion. Only few cases of oral lipoma exceeded more than 25mm in diameter, in literature the average size reported is 20mm.[6,22] The lesion described in this case report measured over 40mm in diameter.

The treatment of choice of oral lipoma can be surgical or medical, but surgical excision remains the best treatment of choice. No recurrence reported with surgical excision, although it is possible ininfiltrating lipoma due to non-encapsulation and inadequate excision[9] There is no evidence of malignant transformation of such lesions in literature[24,25] Medical management include intra lesional steroid therapy which leads to atrophy of adipose tissue, but such a treatment is still in the trial stage.[26]

Our present case was diagnostically a challenge because the lesion was deep seated and extensive in size. Due to its deep position, extra oral incision was planned for excision of lesion. The nature of the excised lesion and histopatology report confirmed the diagnosis as lipoma.

Though the recurrence rate is very low for an encapsulated lipoma, the patient is kept under periodic follow up. 6 months follow-up pf the patient revealed no recurrence. (Figure 5)



Figure 5: Six months postoperative Extra Oral Photograph

Conclusion:

Oral lipomas are rare and most of the lesion diagnosed only during routine examination. The present case reports a relatively rare lesion due to in unusual site and extensive size. Since the recurrent rate is very low the prognosis of oral lipomas is excellent after surgical excision.

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