



ORIGINAL RESEARCH PAPER

Dental Science

INTRAORAL LIPOMA:A REVIEW

KEY WORDS: Lipoma, Asymptomatic, Mesenchymal tumour, Conservative treatment.

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ABSTRACT

Lipoma is a peripheral mesenchymal tumour of mature fat cells. Its intraoral occurrence is rare. It is usually asymptomatic. The lesion after excision does not recur very often. It is important because it can enlarge and cause problems like dysphagia and interference with tongue movements. Also, other lesions which are dangerous can be similar to it.

Introduction:

Lipoma is an uncommon neoplasm of oral cavity. It can occur in buccal mucosa, tongue and floor of the mouth. It can occur in other intra oral areas as well. It is usually asymptomatic. It can interfere with tongue movements and can cause dysphagia depending upon location. Its cause is unknown. Trauma and metaplasia of perivascular connective tissue have been suggested as playing a role. Even though histologically similar to normal fat cells, lipoma cells appear to differ metabolically from later. On starvation, fat is lost from normal fat depots, but not from lipoma. Lipoprotease, lipase activity is reduced. Fattyacid precursors are taken into lipoma rapidly than normal fat depots. Roux in 1848 first described intraoral lipoma. He called it "yellow epulis" (alveolar masses) .Few lipomas show rearrangement of 12q,13q,6p chromosomes.^{1,2}

Clinical features:

It is usually asymptomatic, slowly growing, nodular or polypoid, circumscribed or diffuse, sessile or pedunculated tumor (fig1). It has no gender predilection. It has yellow colour if superficial because of fat seen through thin overlying mucosa. Sometimes, blood vessels can be seen through thin mucosa. It is pink as normal adjacent mucosa when it is deeply located. It is soft and spongy, compressible, nonreducible and pseudofluctuant. It is negative for transillumination test. Because it is soft and pseudofluctuant, it can be mistaken to a "cyst". It is non-productive on aspiration. Clinically, it can be of 2 types. One is diffuse affecting deeper tissues. Other is superficial and encapsulated when deeply located.^{3,4}

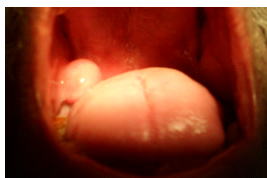


Fig.1: Pedunculated intraoral lipoma

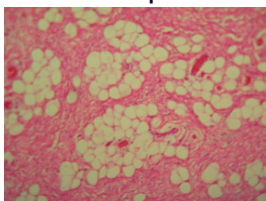


Fig.2: Fat cells with connective tissue stroma

Histologically, lipoma has mature adipocytes with collagen strands (fig 2). It has thin fibrous capsule. It can be infiltrating lipoma when located in striated muscle, it can be fibrolipoma when excessive fibrosis is present between fat cells, angiolipoma when excessive vascular channels are present, it can be myxoid lipoma or myxolipoma when myxoid stroma is present, and can be angiomyxolipoma when vascular channels and myxoid stroma is present. It is called pleomorphic lipoma when spindle cells appear dysplastic with pleomorphic giant cells. It is called angiomylipoma when it originates from walls of arterioles. Osteolip oma, chondroid lipoma, ossifying chondromyxoid lipoma, myelolipoma have bone, cartilage, bone plus cartilage, bone marrow tissue respectively. Adenolipoma and perineural lipoma can also occur.^{1,2,3,4}

Discussion:

The term "lipomatosis" is given when wide area of stroma or tissue is involved. "Hibernoma" is the occurrence of multiple tumours of brown fat. Lipoma should be differentiated from inflammatory lesions like pyogenic granuloma, epulis granulomatosum and fibroma. Also, from other mesenchymal tumours like myomas, schwannomas, neurofibromas, traumatic neuromas which are firm in consistency with discrete borders and freely movable when situated in loose connective tissue. It can be differentiated from herniated buccal pad of fat in which history of trauma will be present. The superficial cavernous haemangioma, lymphangioma and varicosity are blue coloured in contrast to yellow coloured lipoma due to presence of fat in it. They are reducible i.e., emptiable on pressure. FNAC yields fluid(blood or lymph) whereas in lipoma it is non-productive. Fat cells stain with sudan dye. Pyogenic granuloma bleeds on palpation. Fibroma is firm in consistency. In posterolateral aspect of palate, lesion is mostly minor salivary gland tumour. It could be granular cell myoblastoma when located on lateral border or dorsum of tongue which usually occurs in children. However, leiomyoma is the common tumour of tongue. Peripheral metastatic tumour can be differentiated from lipoma by history of primary tumour or symptoms of such tumour may indicate its probable existence. Moreover, intrabony tumours are commoner than peripheral metastatic tumours of oral cavity. Exophytic squamous cell carcinomas are usually ulcerated. Buccal fat pads can be sometimes be mistaken to lipoma in obese people.^{1,2,3,4,5,6,7}

Conclusion: Adequate knowledge of lipoma and its differential diagnosis is essential. Although it is not dangerous, it can cause hinderance to tongue movements and dysphagia necessitating its removal. Other lesions can be misdiagnosed as lipomas. Lipoma

can be associated with syndromes like Gardner, Cowdens and Proteus syndromes. It can occur in encephalocraniocutaneous lipomatosis, multiple familial lipomatosis and vonrecklinghausen's disease (neurofibromatosis). Liposarcoma can rarely occur in lipoma. Conservative surgical excision of lipoma is the treatment of choice. An infiltrating lipoma often must be debulked due to difficulty in complete removal.^{5,6}

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