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CASE REPORT

Unusual Size of Soft Palate Lymphangioma: A Case Report

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ABSTRACT

Twenty-two years old female presented with a huge lymphangioma situated in the soft and hard palate crossing the midline and spread out to the left retromolar area. Lymphangioma clinically observed as transparent, smooth, nodular elevations, with reddish to dark purple lymphatic vessels filled by blood. The chief complaint of the patient is bleeding especially with feeding. A biopsy took from the soft palate; histopathological result revealed lymphangioma. The patient treated by intralesional injection of cortisone mixed with dental local anaesthetic contains a vasoconstrictor. The lesion disappeared, and there was no relapse for two years followed up.

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INTRODUCTION

Lymphangiomas are caused by atypical changes in the lymphatic system. Their aetiology is obscure, it's a begins lesion seen between the 6th and 10th week of growth when the immature lymphatic tissue fails to communicate with the venous or lymphatic system¹. A lymphangioma is described as a "somatic mutation," meaning that it affects the genes but is not an inherited condition, can occur in both males and females of any race. They are a rare condition affecting around 1 in 4,000 newborns. Lymphangioma is an alteration in lymphatic vessels, frequently includes the head and neck

area. In the neck seen more in the posterior triangle, while orally are usually found predominantly on the tongue². Cases have also been seen in palate, gingiva, lips, and mandibular³. In this area, it has clinically shown up as transparent, generally collected red or purple vesicles. The profound lesion shows up as nodular masses of inconstant colour and superficial texture⁴ Lymphangioma is a considerate hamartomata's tumour of lymphatic channels. Close to 50% of the cases are available since birth, and around 90% created before

two years of age. It seldom analyzed in adults, cited from ⁵.

Three categories of lymphangiomas described: the superficial multicystic, the deep cavernous; and the cystic hygroma, deformity in lymphatic progress showing diverse degrees of seriousness. A great percentage of those occurring in the head and neck about (half to 65%) appearing during childbirth, while 90% are clinically evident by the age of three years; the groovy part of these are of the deep cavernous ^{4,6}.

The most widely known presentation is a painless soft mass that gradually enlarges and after that remaining and persists for a long time. Even if, enlargements and shrinkages happen, a residual mass remains. The superficial multicystic type is the most static of the three varieties. The mass enlarged gradually on grown-up life as a fragile growth, usually make a pebbly surface that may seem to contain fluid threatening because of their size or secondary infection ⁷.

Surgical removal is the best management for lymphangiomas, although numerous types of lymphangiomas cannot be removed completely as a consequence of their contribution to important structures; in this way, these lesions related with the highest danger of recurrence ^{3,4,8,9,10,11}. Other treatment include sclerotherapy, dextrose, tetracycline, doxycycline, bleomycin, ethibloc. Radiation therapy, cryotherapy, electrocautery, steroid injection, embolisation, ligation, and laser surgery have also been suggested to treat lymphangioma ^{3,12}.

CASE PRESENTATION

A 22-year-old female patient was referred to the oral and maxillofacial department in Basrah school of the Dentistry/University of Basrah. The main complaint of the patient was bleeding especially with eating. At the clinical intraoral examination, we watched exophytic vesicular swelling with a flimsy covering. The shadowing is going from translucent to yellow-ruddy with dark spots; the mass is soft in consistency, situated in the soft and hard palate, cut across the midline and stretch out to the left retromolar area (Figure 1). Clinically, such lesion considered as lymphangioma or hemangioma. For diagnosis, an incisional biopsy was taken from the soft palate and sent for histopathological examination, which show uncovers favourable squamous mucosa with submucosal dilated vascular channels lined by normal endothelial cells with eosinophilic amorphous liquid inside and the histopathology gose with lymphangioma. The patient was sent for haematological examinations, hormonal test, renal capacity and liver capacity are all normal. The patient was dealt with by intralesional injection of hydrocortisone sodium succinate 100 mg, diluted by 2% local anaesthetic solution (1.8 ml, epinephrine 1/80000), the patient was given, the lesion divided to six areas each given tow injection week after week in an interval of 12 weeks. After injection, the patient felt anaesthesia keeps going for a considerable period of time due to the effects of the local anaesthetic solution, yet no pain or

bleeding. Follow up was stretched out to two years without recurrence).



Figure 1. lymphangioma in the soft palate.



Figure 2. Two years after treatment.

DISCUSSION

The tongue is more affected by oral lymphangioma, trailed by the lips, buccal mucosa, palate, and floor of the mouth^[5,6]. Exceptional events include the soft palate and retromolar area, and few cases accounted for on soft palate, approximately 3x2 cms ^{6,13,14}. The diagnosis of lymphangiomas is not difficult, difficult,

but biopsy and histopathological examination is important to get a definitive diagnosis ⁶.

Current treatment strategies for lymphangiomas incorporate surgery, Sclerotherapy and laser treatment, or a mix of them ⁹. The confined microcystic lesion can be resected totally, however outlandish for broad and diffuse ones, the reasons being:

- (1) the greater part of them include the lip, cheek, soft palate and tongue; complete excision may bring about serious tissue defects, prompting to cosmetic and functional complications.
- (2) the lesion inadequately demarcated the diffusion of lymphatic vessels of lymphangiomas are thin and friable diffuse lymphangiomas frequently include vital structures, for example, the cranial nerves or impotent blood vessels, making complete resection more finish resection of the lesion is particularly testing a result of the potential complexities, for example, facial nerve injury, Horner's disorder, postoperative lymphatic leakage, seroma and poor healing ³.

Intralesional steroid injection has likewise been utilized to treat tongue lymphangioma; yet, treatment isn't curable with steroid injection only ¹⁵, used to reduce the size of cystic hygroma before surgery ¹⁶. Intralesional steroids cause a significant increment in mast cell thickness, diminished translation of cytokines, diminished platelet-growth factors A and B, and diminished essential fibroblast development factor. These components modify cell functions, bringing about a relapse of the lymphatic malformation without a significant inflammation reaction. Authors mix cortison with other drugs like Bleomycin and Bevacizumab ¹⁷.

For soft tissue injection, most dermatologists use anaesthetic with the corticosteroid to reduce pain, confirms the conveyance of medication to the suitable target, and weakens the crystalline suspension so it is better diffused inside the injected areas ¹⁸. There are some hypothetical reasons why it might be of benefit:

- 1) there might be a volume impact of the nearby sedative on expanding the injectable area ¹⁹.
- 2) To avoid side effects which include: Pain and Bleeding ^{20, 21}.
- 3) anaesthetics may likewise prolong the span of time the steroid stays inside the joint ²².

The only lesion treated by intralesional cortisone with dental local anaesthesia contains vasoconstrictor is in central giant cell granuloma of the jaws ²³, this mixture not used to treat any oral soft tissue lesion.

In this case, cortisone is used with dental local anaesthesia contain vasoconstrictor, after injection, no pain, bleeding due to the presence of vasoconstrictor which prolong the depth and the duration of anaesthesia while reduce the risk of toxicity ²⁴, when it mixed with cortisone its prolong the duration of action of cortisone also no bleeding at the site of injection and reduce the number of injections needed, so only two injections are given on each area, the patient cure from the disease and no recurrence for two years follow up.

CONCLUSIONS

Cortisol can be successfully treated oral lymphangioma when it's mixed with a local anaesthetic solution containing vasoconstrictor, this assortment is available, cheap, easy to administer, can treat extensive, diffused cavernous lymphangioma without complication also it's satisfying by the patient and it's usable for any patients, unlike surgical excision or laser application. This adjustment can be practised to care for other chronic persistent intraoral lesion.

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