Case Report

Cavernous Lymphangioma of the Lower Lip- A Rare Case Report

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ABSTRACT
Lymphangioma are rare, benign, and hamartomatous tumors of the lymphatic vessels, that show a marked predilection for the head and neck region. Very few cases of Cavernous lymphangioma have been reported to occur in the lower lip. We report a rare case of Cavernous Lymphangioma of the lower lip in a 13 years old child who was treated surgically by excision and primary closure. Postoperative wound healing was satisfactory and there was no recurrence found till the last follow up.
KEY WORDS: - Cavernous Lymphangioma, Lower lip, Surgical excision.

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INTRODUCTION

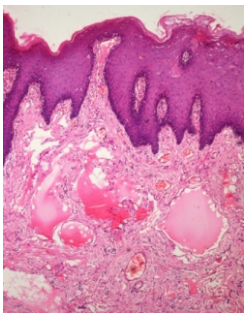
Lymphangioma are a heterogeneous group of benign vascular malformations of the lymphatic system composed of cystically dilated lymphatics. They commonly present as a mass particularly in the head and neck areas. Due to their size and location, they are sometimes a real therapeutic challenge. [1-4] Approximately 75% of all cases of lymphangioma occur in the head and neck region, of these 50% of lesions are noted at birth, 90% developing by 2 years of age. [5] When lymphangioma involves the oral cavity, the anterior two third of the tongue is the most commonly affected region. [6,7]

We report a rare case of Cavernous lymphangioma of the lower lip which was managed by surgical excision.

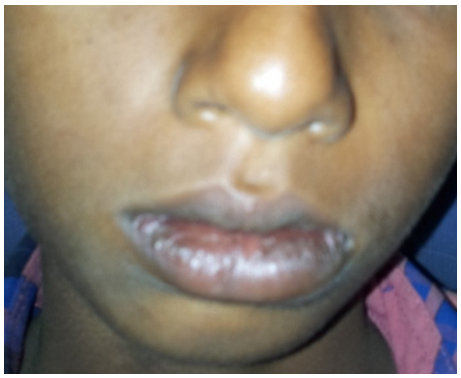
CASE REPORT

A 13 years old male child reported to our department with a chief compliant of growth in the lower lip since 5 years. The growth was initially small in size and gradually increased to the present size affecting the whole lower lip, causing eversion of the lip, inability to approximate with the upper lip and giving an unpleasant look. There was a past history of a fall 5 years previously which lead to abrasion of the lower lip which precluded the growth. The lesion was painless but the patients main concerns were an unsightly looking lip, inability to close the lips together and dribbling of saliva.

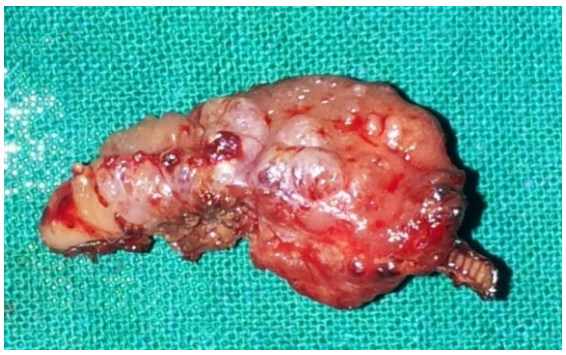
On general physical examination, the patient was moderately built and moderately nourished; there were no signs of anaemia, icterus, cyanosis, clubbing or lymphadenopathy. On extra oral examination, there was no facial asymmetry, mouth opening and TMJ movements were within normal limits. On intra oral examination, the lower lip was protruding, the swelling involving the whole of the lower lip, more pronounced on the left side. An irregular ragged lesion was seen on the inner side of the lower lip (Fig 1).



Incisional biopsy was carried out, the result being suggestive of oral lymphangioma. Wide excision of the lesion was done under local anaesthesia using cautery .



The specimen (Fig 2) was sent for histopathological examination. Sutures were removed on the 7th postoperative day. Wound healing was satisfactory and uneventful. Patient was followed up on monthly basis for a period of 1 yr and there was no recurrence of the disease (Fig 3).



Histopathologic sections showed nonkeratinized stratified squamous epithelium overlying a fibrocellular stroma. The underlying connective tissue showed numerous, large, dilated flat endothelium lined channels

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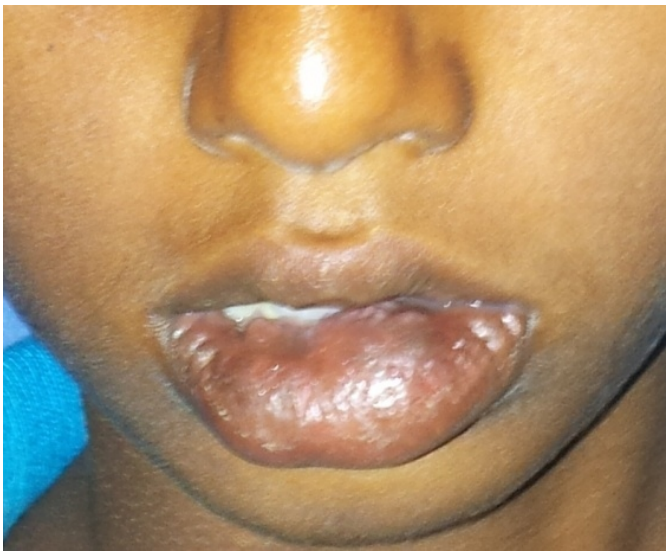
filled with proteinaceous fluid. Many such channels were seen immediately beneath the epithelium, replacing the connective tissue papillae. Variably sized similar channels were present in the deeper connective tissue. The overall picture was suggestive of Cavernous Lymphangioma of the lower lip (Fig 4).



DISCUSSION

Lymphangioma was first described in 1828 by Redenbacher .[8] Various authors define lymphangioma as a congenital malformation of the lymphatic system,[9,10,11,12] while others regard them as congenital hamartoma or benign vascular tumors caused by the proliferation of lymph vessels.[10, 13,14] The incidence of lymphangioma is relatively rare and usually occurs during the first two years of life,[4, 8, 13] whereas in our case it was found in a 13 years old child with a 5 year prior history which is a rare finding. The most frequently involved regions include the head, and neck, followed by extremities, trunk, and abdomen respectively. [10, 12, 14, 15] In the head and neck, tongue involvement is more often seen than other areas such as the cheeks, lips, floor of the mouth, palate and gingiva. [6, 7] A review of current literature reveals that very few cases of the Lymphangioma of the lower lip have been reported. [4, 8, 12, 13, 14, 15]

Though histologically benign, their infiltrative nature may cause larger lymphangioma to expand into adjacent tissues and/or vital structures, causing aesthetic, functional, and occasional life-threatening complications. [4, 8, 9, 11, 12, 15] Lymphangioma are congenital formations however in our case, it seems that the lesion was brought about by a past traumatic occurrence. Most lymphangioma present as a mass or diffuse swelling, which grows slowly and after some time may slowly regress. [16, 17, 18] In our case there was progressive growth with no evidence of regression.

Lymphangioma are classified as microcystic (capillary), macrocystic (cavernous) and cystic lymphangioma (hygroma) according to the size of the lymphatic cavities incorporated in the lesion. [5] Overall, lymphangioma account for about 6% of the benign tumors in the pediatric population, with both sexes being affected equally. They neither become malignant nor have a familial tendency. [2, 16] Though lymphangioma are benign lesions, the involvement of vital structures, aesthetic and functional requirements may necessitate the treatment of these pathologies. [6]

Various methods have been reported for the treatment of lymphangioma. Procedures such as surgical excision, radiation therapy, cryotherapy, electrocautery, sclerotherapy, steroid administration, embolisation, ligation, and laser surgery have been proposed to treat lymphangioma.[5,8,9,10,11,12,13,14,15] Aspiration is not a definitive treatment but may be useful for emergency decompression. [4] It has been suggested that OK-432 can be used alone as a primary therapy or after partial surgical excision in recurrent lymphangiomas. Aspiration, injections, and laser excision treatments have been reported to have high recurrence rates. [19]

The various concerns in treating the Lymphangioma of the lower lip are its importance in facial aesthetics and function. Absence of, or a deformed lower lip can lead to aesthetic, functional, social and, psychological problems. The lip forms the oral seal and helps in speech, mastication, respiration and prevents desiccation of the oral mucosa. Hence all effort should be made to preserve the normal anatomy and function of the lip. Its importance in smiling, facial expressions, kissing and other socio-sexual interactions cannot be over emphasized. Maintaining the lips integrity should be the most important consideration with any treatment option. In our case, wide excision was done keeping in mind the above considerations. The excision was done intraorally in an elliptical manner, the superior margin being within the wet vermillion immediately below the dry vermillion, adequate undermining of the surgical margins ensured minimal tension on the wound and small diameter resorbable sutures were used. Thus preserving the aesthetics and function of the lower lip, while achieving complete removal of the lesion.

CONCLUSION

Lymphangioma of the lips are very rare. When treatment is required due to complications resulting from aesthetics or function of the lip, consideration must be given, to maintaining the lips, aesthetic and functional integrity to avoid social and psychological issues for the patient. Various treatment modalities exist but surgery is still a very effective treatment option with little recurrence.

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