Case Report

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SMILE MAKEOVER WITH DOUBLE LIP CORRECTION

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ABSTRACT

Congenital double lip is a rare developmental anomaly which usually involves the upper lip. It may occur in isolation or as a part of Ascher's syndrome. The occurrence of double lip may result in facial deformity especially when patient attempts to talk, smile, or even try to show the teeth. It affects patient's esthetics and also interferes with speech and mastication. Here we report a case with Double Lip with Triple Frenum attachment which was surgically treated for cosmetic reason as well as to maintain oral hygiene.

KEYWORDS: Lip; frenum; muscle; smile

INTRODUCTION

Double lip is an infrequent oral anomaly that may be acquired or congenital.[1] Double lip is one of the rarest forms of lip abnormality.[2] Double lip, also referred to as ''macrocheilia'' or hamartoma, is a rare anomaly which affects the upper lip more commonly than the lower lip and rarely both lips are affected. In the foetus, the mucosa of the upper lip is divided into 2 transverse zones namely, an outer zone (pars glabrosa) whichis smooth and close to skin, and an inner zone (pars villosa) which is villous and similar to the mucosa. A doublelip, which is hypertrophy of the pars villosa, is thought toarise during the 2nd and 3rd month of gestation, from persistence of an exaggerated horizontal sulcus between the parsglabrosa and the pars villosa of the developing lips. Clinically, the double lip, usually the upper, has a horizontal running duplication located between the inner (pars villosa) and the outer (pars glabrosa) zones of the lip. A vermillion with transverse furrow between the two borders appears when orbicularis oris muscle contracts during a smile. The fold usually cannot be seen when the lips are closed, but visible when the patient is smiling or talking. It often takes the form of two masses of hyperplastic tissue on either side of the midline.[3] Double lip is caused by excessive areolar tissue and non-inflammatory labial mucosa gland hyperplasia of the pars villosa.[4,5] During smiling, the lip is retracted and the mucosa is positioned over the maxillary teeth, resulting in a "cupid's bow" appearance. Double lip may require surgical correction for esthetic reasons. Treatment should be accomplished by excision of the mucosa and sub mucosal tissues, without involvement of the underlying muscle.[6]

CASE REPORT

A 19 year old male patient was referred to the Department of Periodontics, Maharaja Ganga Singh Dental College and Hospitalfor management of unusual upper lip. There was no family history of double lip (Fig. 1). There was no history of any trauma or surgery. There was no blepharochalasis and thyroid gland enlargement. On clinical examination, there was a bulge of excessive tissue seen approx 10-11 mm from commissure of both the sides of the upper lip only when the patient smiled or talked. The bulges were not visible at rest.Patient was also having accessary frenum above the level of midbuccal area of central incisor on one side and another was between central and lateral incisors (Fig. 2). It was hindering during brushing, so it also has to be relieved. Patient was prepared for surgical treatment for which patient underwent complete scaling, root planing and complete blood investigation procedures, which was within normal limits.Surgical treatment was done under Local Anasthesia (bilateral infraorbital nerve block). Nerve block was given to minimize the distortion of tissue mass. Removal of excessive tissue in surgical management is mainly done using scalpel. But in our case we compared scalpel and laser both on two sides of the lip. The

Fig. 1: Double Lip visible during Smile

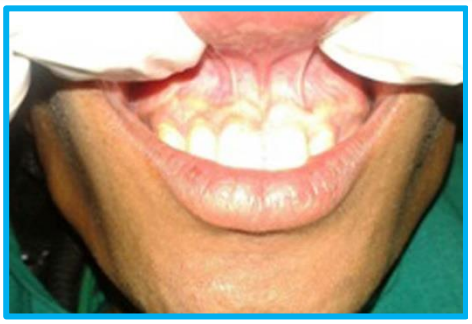

Fig. 2: Accessory Frenum

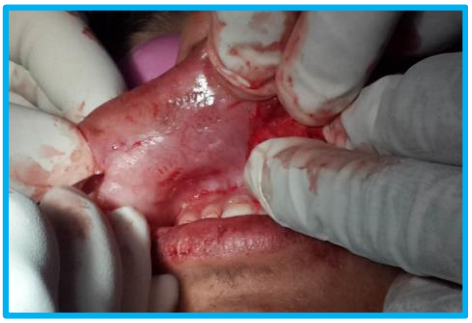

Fig. 3: Surgical Insicion on Right Side

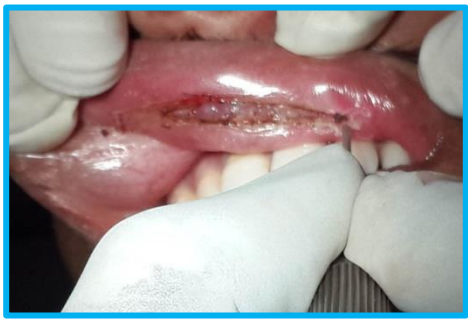

Fig. 4: Tissue removal by Laser on left side

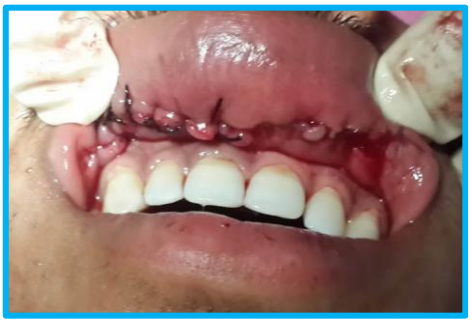

Fig. 5: Suring done after removal of tissue

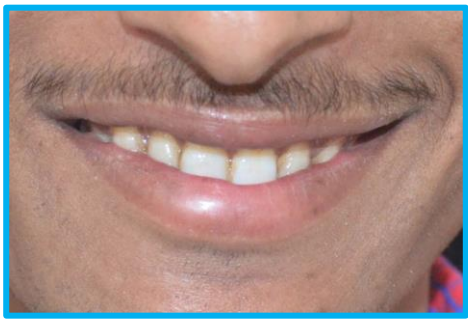

Fig. 6: Post-Operative after 21 days

excessive mucosal bulges were demarcated from the crest of lip by using Ellie's tissue forcepapprox 1-2mm away from the vermilion border of the upper lip and tension was created by stretching the tissue so a clear vision of the laser tip placement was there. Excision of tissue of left side was started from medial to lateral side up to midline using laser, the another side was excised using scalpel. After excision of excessive tissue, left side sutured using 5-0 resorbable suture material, while the right side was sutured using 5-0 non-resorbable silk suture (Fig. 3, Fig. 4 & Fig. 5). Patient was sent with postoperative instructions and was recalled next day to check one day post-operative healing. Sutures were removed and the site was debrided 10 days after surgery. Results were promising esthetically and functionally after 21 days (Fig. 6). Histologic examination revealed nonkeratinized stratified squamous epithelium with numerous narrow papillas, collagen fibers, blood vessels, fat cells, and numerous mixed minor salivary glands. Few muscle fibers were also present in the specimen.

DISCUSSION

Double lip is also referred to as macrocheilitisor hamartoma, consists of a fold of excess or redundant hypertrophic tissue on the mucosal side of the lip. It occurs most often bilaterally on the upper lip, but may be unilateral and can affect both the lips. John[7] reported case of congenital double upper lip, which was surgically treated after orthodontic treatment, for cosmetic reasons. The different surgical approaches to the management of double upper lip are reviewed with a note on timing of surgery in patients who have concurrent orthodontic or prosthodontic problems. Although present at birth, the congenital double lip condition may become apparent only after eruption of the teeth. The furrow dividing the double lip represents the

exaggerated boundary line between the two zones. In the double lip the buccal villous part becomes hypertrophic. In some patients, the central constriction is apparently due to the attachment of the upper frenulum. The acquired form of double lip may be secondary to trauma and oral habit, and may develop in association with Ascher's syndrome which consists of the triad of blepharochalasis, nontoxic thyroid enlargement and double lip. It is not clear whether thyroid enlargement is a consistent or necessary feature of the syndrome. The lip becomes enlarged in a manner suggestive of angioneurotic edema and, over time, this swelling partially resolves. Srivastava A *et al*.,[8] reported a case of congenital double upper lip which was surgically treated for cosmetic reason. Although surgery may be undertaken to facilitate speech and mastication, majority of cases are operated for cosmetic reasons. Several surgical techniques have been described to repair double lip: W-plasty, electrosurgical excision and triangular excision. In the current case, good results were obtained with transverse elliptical excision. But in this case, excision was done by both scalpel and laser on two different sides of the upper lip. Both laser and scalpel has its advantages and disadvantages. Use of laser makes very good access to intraoperative field with minimal blood and very good postoperative healing and scalpel makes the procedure less time consuming.

CONCLUSION

The treatment of congenital double lip is indicated when the excess tissue interferes with mastication or speech or leads to such habits as sucking or biting the redundant tissue or is of esthetic concern to the patient. So the use of laser provides better healing results, specially in case of surgical areas with esthetic concerns.

CONFLICT OF INTEREST & SOURCE OF FUNDING

The author declares that there is no source of funding and there is no conflict of interest among all authors.

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