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Case Report

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Aesthetic Management of an Atypical Lip Malformation - Report of Two Cases

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ABSTRACT

Double lip deformity is a rare congenital or acquired anomaly characterized by the presence of redundant mucosal folds in the upper or lower lip, often more pronounced in the upper lip. This condition may manifest as a cosmetic concern rather than a functional impairment. Though typically asymptomatic, the deformity becomes evident during smiling or speaking, leading to patient discomfort or self-consciousness. The etiology of double lip deformity can be congenital, linked to developmental anomalies of the lips, or acquired, often associated with habits such as lip sucking, trauma, or conditions such as Ascher syndrome. The clinical presentation involves excess lip tissue appearing as a fold or double layer, particularly in the upper lip. Diagnosis is primarily clinical, based on visual examination and patient history, with no additional imaging typically required. This case report reviews multiple patients who presented with double lip deformity, focusing on its clinical characteristics, psychosocial impacts, and treatment approaches. Surgical excision is the preferred treatment for those seeking correction, especially for aesthetic reasons. This procedure is minimally invasive and generally yields excellent cosmetic results with low recurrence rates.

Through this case report, we aim to enhance understanding of this rare facial anomaly and discuss the significance of early diagnosis and intervention. The reports also highlight the importance of personalized care in managing patients' aesthetic concerns, while ensuring minimal functional impact.

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Introduction

"'Macrocheilia,' commonly known as double lip," is an unusual abnormality that is defined as the appearance of excess tissue in the area of lip's wet line during functional lip movements [1]. It occurs most often in the upper lip, although both upper and lower lips are occasionally involved. It consists of a fold of hypertrophic tissue on the mucosal side of the lip and is caused by excessive areolar tissue and noninflammatory labial mucous gland hyperplasia of the pars villosa [2]. Double lip usually manifests as two masses of hyperplastic tissue on either side of the midline. Occasionally the hyperplastic tissues may not be symmetrical with one side being larger than the other [3].

Double lip can occur as congenital and acquired types. The congenital double lip is due to developmental anomaly. It may be seen in isolation or in association with Ascher's syndrome, which is characterized by the triad: double lip deformity, blepharochalasis (eyelid atony following recurrent edema) and non-toxic goiter [1]. Acquired double lip has been reported in cleft patients, following lip trauma, mechanical irritation, and as a consequence of lip-biting habits or oral habits such as sucking the lip between diastema [1].

Clinically, the presence of a double lip becomes more noticeable during patient expressions such as smiling or talking. During the activity of orbicularis oris, muscle fibers stretch, and the extra tissue mass, which has no fiber penetration droops down and becomes clearly visible as a second upper lip. In the case of bilateral double lip, the retracted lip reveals a distinct cupid's bow appearance, with the mucosa positioned over the maxillary teeth.

There has been no race or gender predilection recorded; however, Palma et al. [2009] presented a male to female ratio of 7:1 [7].

The excessive visible hyperplastic lip tissue may cause aesthetic and functional discomfort, as well as psychological stress to the affected person. The treatment of choice is surgical excision and is more often desired by the patients to correct their facial deformity. Essentially the surgical excision should be limited to the mucosal and submucosal tissue with no involvement of the underlying muscle [4-6].

The recurrence of double lip after surgery is rare.
The present article describes a case report of two cases in which a simple anesthetic and surgical technique has been followed with satisfactory esthetic results.

Case Presentation

Case Report 1

A 17-year-old male patient reported to the department of Periodontics, Govt. College of Dentistry, Indore with chief complaint of swelling in the upper and lower lips which had been noticeable for a few years giving an unesthetic appearance and causing difficulty in speech and mastication, caused by the excess tissue. Oral examination revealed bilateral folds of hyperplastic mucosal tissue occurring on the mucosal surface of both upper and lower lip, which appeared as double lip whenever patient smiles [Figure 1A,B]. The tissue was of soft consistency, mobile, fluctuant and non-painful when palpated.

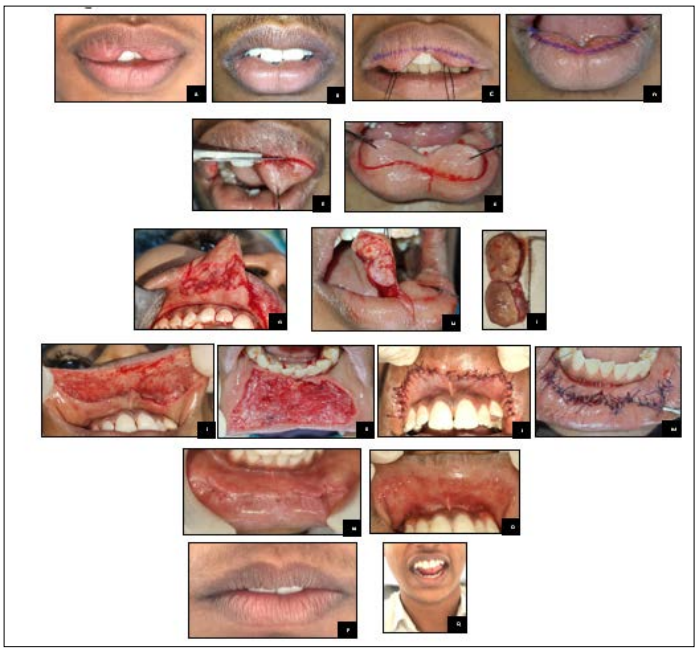

Figure 1: Clinical image of upper and lower redundant tissue (A,B) Marking the incision line by H&E pencil (C,D) Elliptical incision (E,F) Excision of excess glandular tissue (G,H,I,J) Excision done till the depth of submucosa (K,L) Suturing done using 4-0 vicryl suture (M,N) 14 days post operative of lower lip (O) 3 Month post operative of upper lip (P) Postoperative view at 1 year showing cosmetic result while smiling (Q,R)

Figure 2: Clinical view of cupid bow shaped upper lip(A) Marking of the incision line(B,C) Excision of the tissue by holding with suture(D) Excision done till submucosal level(E) Excised tissue(F) Suturing done with 5-0 polypropylene suture(G) 1Month post operative of upper lip(H) Postoperative view at 6 month (I)

There was no family history of double lip. The patient's medical and dental histories were non-contributory and gave no history of lip and nail biting or other habits. A diagnosis of congenital double lip was made. Surgical excision was suggested to the patient. The surgery was planned using transverse elliptical incisions and the outcome of the surgery was satisfactory.

Case Report 2

A 38-year-old female presented with a prominent, redundant fold of tissue in the upper lip since early childhood, which becomes more obvious when smiling or speaking. The patient reported no pain but expressed aesthetic concerns. There was no history of trauma, surgery, or systemic illness. Examination revealed an additional mucosal fold on the inner aspect of the upper lip [Figure 2A]. The lower lip appeared normal. The condition was diagnosed as congenital lip malformation that is double lip. Surgical excision was discussed as a treatment option for cosmetic correction.

Surgical Protocol

The patient was explained about the surgical correction of his/her problem, and the patient gave his/her consent for performing the surgery. Then, the patient underwent thorough Phase I therapy, which includes scaling and root planing for the removal of plaque and calculus deposits. Then, the patient was recalled after 1 week for re-evaluation and routine blood investigation were done, which came out within physiological limits. Both the cases reported in the present study were performed under local anesthesia.

Before anesthetic solution infiltration, the margins of the tissue to be excised were marked with a surgical pencil.

The infraorbital nerve block was used bilaterally instead of local infiltration to avoid tissue distortion of the mass. The surgery was planned using transverse elliptical incisions. Tissue was marked in an elliptical fashion by asking the patient to smile, and the surgical site was splitted into two halves to avoid profuse bleeding of the tissue that would have been difficult to manage [Figure 1C,D & Figure 2B]. One half was operated on, and the pressure pack was applied for 10 min, then, the second half was also operated at the same appointment. Waiting for about 10 min after anesthesia, the incision was given following the already marked tissue margins [Figure 1E,F & Figure 2C], and tissue was excised till the depth of submucosa along with minor salivary glands and fat tissue [Figure 1G-K & Figure 2D-F]. Care was taken while excising the excess tissue and preserving the normal lip structure so that there would not be any asymmetry or lip length loss postoperatively. Once the tissue excision was complete, the primary wound closure was achieved with the help of 4-0 polyglycolic acid (vicryl) sutures and/or 5-0 polypropylene suture [Figure 1L,M & Figure 2G].

The patient was advised amoxicillin 500 mg t.d.s. and ibuprofen 400 mg b.d. for 5 days. Patient was instructed to avoid any trauma to the surgical area and to avoid any food that can cause stretching of the lip or tension on the suture line for three weeks. On the 14th day follow-up, sutures were removed [Figure 1N,O].

The patient was reviewed after one week, then after one month and finally after three and twelve months after the treatment, healing was uneventful and no surgical complications or recurrence were noted. The patient was comfortable and satisfied with the outcome of the treatment [Figure 1(P,Q), Figure 2 (H,I)].

Discussion

Double lip is an uncommon clinical anomaly, which might be congenital or acquired. It usually affects the upper lip bilaterally, although it can also occur unilaterally in both the upper and lower lips [2]. The condition consists of a fold of excess or redundant hypertrophic tissue on the mucosal side of the lip. Double lip is usually in-conspicuous when the lips are at rest but the excess fold of tissue projects beyond the vermilion border when the lip is retracted as during smiling, laughing or talking. Cupid's bow appearance or midline constriction is a typical feature of the double lip [12].

A few cases of the double lip in association with other oral anomalies such as bifid uvula, hemangiomas, cleft palate, and cheilitis glandularis have also been documented [13,14,15].

In both the cases, the double lip was present as an isolated lesion. It was not associated with any syndrome or any other oral anomaly.

Treatment is indicated when the condition interferes with speech and chewing, or for cosmetic reasons [11]. Various surgical techniques to correct a double lip have been described, such as W-plasty, electrosurgical excision and triangular excision, elliptical excision and laser but simple excision through an elliptical incision is usually recommended [8-10]. During the surgery the excess of mucous and submucous tissue is excised leaving the muscle layer intact.

Recurrence of the disease is rarely observed. In the current cases, no recurrence was observed over a year of follow up, the patient's prognosis remained good, and no complications occurred.

Conclusion

Treatment for a double upper lip becomes essential when the extra tissue interferes with problems with speech or chewing, or if it encourages lip-biting or lip-sucking. Treatment is very important since patients are concerned about their appearance. Dentists are among the first to identify, diagnose, and treat this uncommon problem, thereby reducing the psychological trauma to the patient. Surgical management of such rare entity must be accomplished by excision of the mucosa and sub mucosal tissues, without distortion of surrounding tissues and involvement of the underlying muscle fibers.

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