CONGENITAL DOUBLE LIP: AN EXPERIENCE WITH 5 CASES AND A PROPOSED NEW METHOD FOR SURGICAL CORRECTION

M.R. Farahvash

Department of Plastic Surgery, School of Medicine, Tehran University of Medical Sciences, Tehran, Iran.

Abstract - Congenital double lip anomaly is an infrequent developmental abnormality affecting the lips, more commonly the upper lip. 5 cases of double lip are being reported for the first time from Iran and all confined to the upper lip. A new surgical excision is being introduced which is called transverse cupid bow-like elliptical incision. The previous traditional method was a simple elliptical excision. The new method gives the cupid's bow a more natural appearance and keeps the normal shape of the upper lip.

Surgical excision with transverse cupid bow-like elliptical excision is undertaken with regional nerve block anesthesia.

It was interesting to observe that in the upper lip, the buccal portion of the double lip appeared on either side with a midline constriction. Surgical excision with the new method under regional nerve block anesthesia provides good result. The embryology and clinical appearances are discussed with a review of the literature.

Congenital double-lip anomaly is rare, and 5 cases are being reported. All the patients were males, and there was no hereditary history, relation of the parents or any obvious acquired etiologic factor for the development of this malformation.

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INTRODUCTION

Congenital double lip is not a common abnormality. Embryologically, in fetal development, the lip appears separated into two portions transversely, the outer portion being smooth and similar to the mucosa. The grooves dividing the double lip represent a magnified bounding line between these two portions following hypertrophy of the buccal portion (pars villous).

The most important advantage of cupid bow-like elliptical excision is a more natural appearance of cupid bow and a normal shape of the upper lip.

MATERIALS AND METHODS

All the patients were males, aged 18 to 28 years. In all patients the lip was thick even when the mouth was closed and the buccal portion of the double lip became projecting when the mouth was open and the orbicularis oris muscle was contracted (Fig. 1,2,6). The buccal portion appeared as two mucosal bulgings on either side with a central constriction (Fig. 3,4). This was a constant feature in all cases of double upper lip. The constriction may be due to the frenular attachment in the midline of the upper lip.

Two of the the specimens excised were sent for histopathologic examination which showed mucosa with hypertrophied submucosal glands. There were no muscles in any of the specimens.

Surgical procedure

First the incision lines were designed with methylen blue with regard to cupid bow and the excess tissue (cupid bow-like transverse elliptical design).

In all patients, the operation was performed under local anesthesia. Diluted epinephrine (1: 200000) with lidocaine 2% was infiltrated along the incision sites on the lip. After 8 to 10 minutes the excess portion of the double lip was excised through transverse cupid bow-like incisions parallel to the vermilion border (Fig. 5). Closure of the resulting wound was performed by 5/0 monocryl sutures. There were no post operative complications and the results were excellent (Fig. 7).

RESULTS

In all patients the shape of the upper lip was normal and the cupid bow had a natural appearance. The patients who underwent surgery with transverse cupid bow-like elliptical excision technique were pleased with their outcomes. There were no adverse outcomes in these patients.

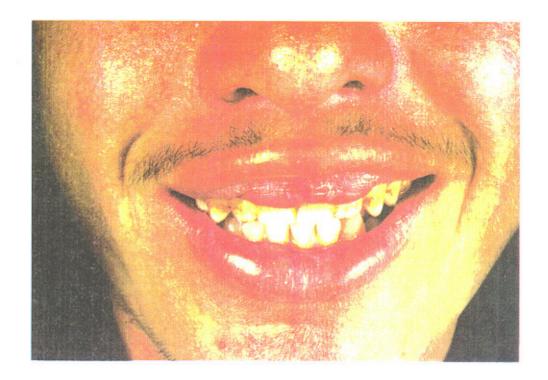


Fig. 1. A 25-year-old man with CDL of upper lip, prominency of the double lip is shown (case 1)

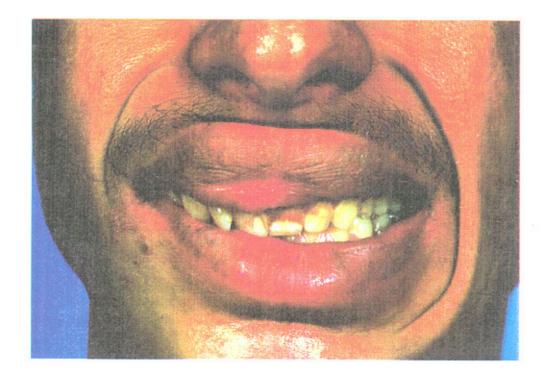


Fig. 2. A 22-year-old man with CDL of upper lip (case 2)

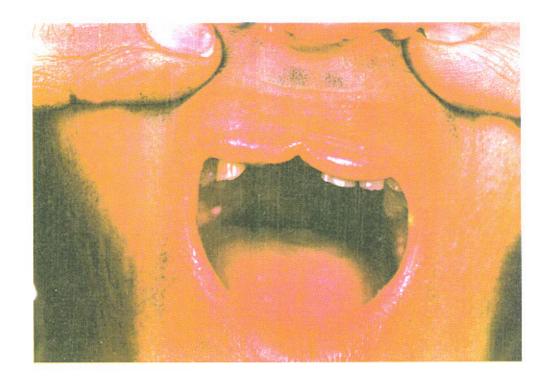


Fig. 3. A 19-year-old boy with CDL (case 3)

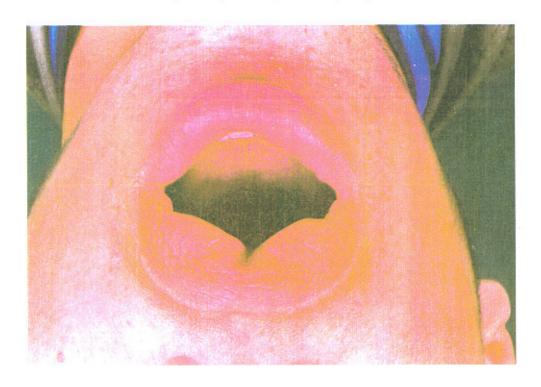


Fig. 4. A 23-year-old man with CDL (case 4)

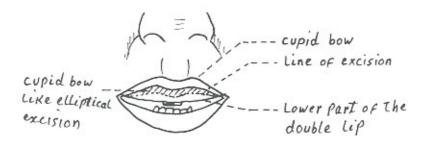


Fig. 5-A. Cupid bow-like elliptical excision

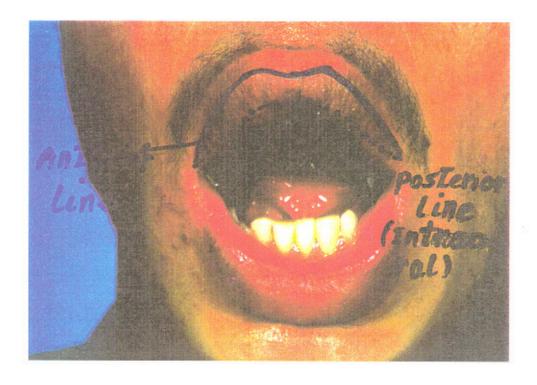


Fig. 5-B. Design of excision through transverse cupid bow-like pattern, parallel to the vermilion border

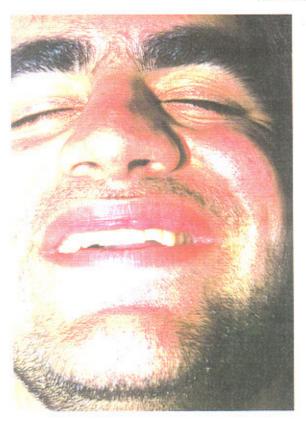


Fig. 6. A 18-year-old boy with CDL of upper lip, orbicularis oris contracted (case 5)

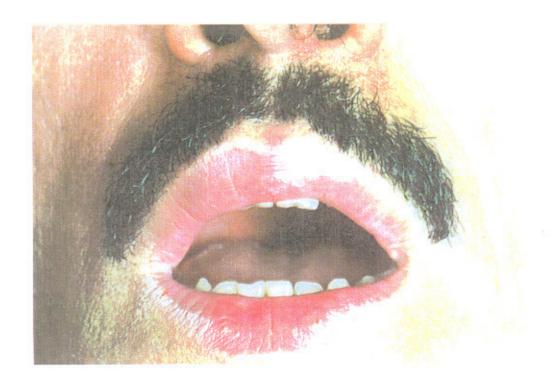


Fig. 7. Patient No. 4 two years following operation

DISCUSSION

Reddy et al (1) from India reported seven cases of double lip on september 1989. Ascher(2) described this condition in a patient with associated blepharochalasis. Calnan (3) reported a case of congenital double lip with a note on embryology.

Foman (4) reported that congenital double lip was usually confined to the upper lip and when the mouth was closed, the lip appeared double.

In my series as well, the lip appeared double even when the mouth was closed, but the buccal portion of the double lip became prominent when the mouth was opened and the orbicularis oris muscle was contracted (Fig 5).

Guerrero-Santos et al (5) advocated a w-plasty for excision of the buccal segment. In my experience excision through transverse cupid bow-like elliptical incisions gives best results. Gupta et al (6) reported 3 cases of double upper lip who were successfully treated by transverse elliptical incisioins. Bhallachapva et al (7) reported a 9-year-old female child with double upper lip treated successfully by two transverse simple elliptical incisions. Sharma et al (8) reported two cases of double upper lip deformity, one in a girl aged 14 years and another in a boy aged 16 years. The new transverse cupid bow-like elliptical excision is an anatomical consideration of excision; it provides the best result and gives the upper lip a more natural appearance. The traditional simple elliptical excision may distort the natural appearance of cupid's bow, because the excision lines are not parallel to cupid's bow.

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