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# Surgical correction and MR imaging of double lip in Ascher syndrome: record of a case and a review of the literature

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**Abstract. – A double-lip is an infrequent anomaly which may occur either isolated or as a component of Ascher's syndrome. Apart from a deformity that may interfere with speech and mastication, surgery may be indicated for cosmetic reasons. We present a case of a male patient with an acquired double lip and blepharochalasis. In order to make the differential diagnosis a magnetic resonance imaging (MRI) was performed. The mass was removed by a transverse elliptical incision under local anesthesia. No post-operative problems occurred and the cosmetic result was good.**

*Key Words:*

*Ascher syndrome, Double lip, MR imaging.*

## Introduction

A double-lip (DB) is an infrequent anomaly which may occur either isolated[1] or as a component of Ascher's syndrome[2-5]. It is caused by abnormal non infiammatory labial mucosa gland hyperplasia of the pars villosa[6] and it may required the surgical correction for aesthetic reasons. In this paper, we report a case of a male patient with an acquired double lip and blepharochalasis that was seen for cosmetic reasons. In order to make the differential, a diagnosis magnetic resonance imaging (MRI) was performed. He had never informed of the possibility of a surgical correction.

### Case Report

A healthy 33 year old man been presented to our Department showing swelling of both sides of the upper lip (Figure 1). He did not present with functional abnormalities of speech or mastication and was wearing a full upper denture. He had not lip sucking habit. The overlying mucosa was intact and appeared normal. On palpation the swelling was soft in consistency, mobile and fluctuant. The patient presented blepharocalasis and Ultrasonography (US) didn't show a thyroid enlargement. After written informed consent was obtained from the patient, a MRI was perfomed to study the mass (Figure 2). The mass was removed by transverse elliptical incision under local anesthesia, without resecting the maxillary labial frenum in order to avoid the modification of lip form. Surgical findings confirmed MRI results.

No post-operative problems occurred and the cosmetic result was good (Figure 3). Histologic examination of the excised material revealed section of labial mucosa covering numerous minor salivary glands and few muscle fibers (Figure 4).

## Discussion

DB is an infrequent anomaly more commonly affecting the upper lip[1,7] in the form of 2 masses of hyperplastic tissue on either side of the midline caused by excessive areolar tissue and non infiammatory labial mucosa gland hyperplasia of the pars villosa[6]. It sometimes can occur unilaterally in one or both the lips[1,2,8].

DB may be either congenital[7,9,10] or acquired, secondary to trauma. The congenital form has been associated to the persistence of the horizontal sulcus between the pars glabrosa and the pars villosa of the lip[5,11,12]. However, it has been suggested that the original DB may be enhanced by a reactive process after a "sucking-in" of the tissue between the teeth, or maloccluding dentures[11,13]. Moreover, DB may occur either isolated[1] or as a component of Ascher's syndrome[2-5]. Some Authors[2] reported that the first case of DB

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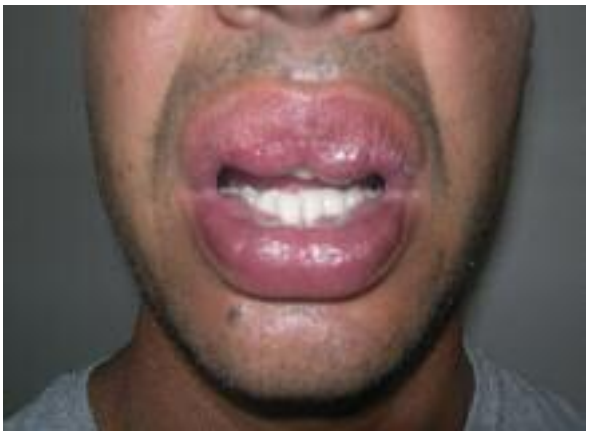

**Figure 1.** Initial aspect of the bilateral upper double lip of a 33 years old man.

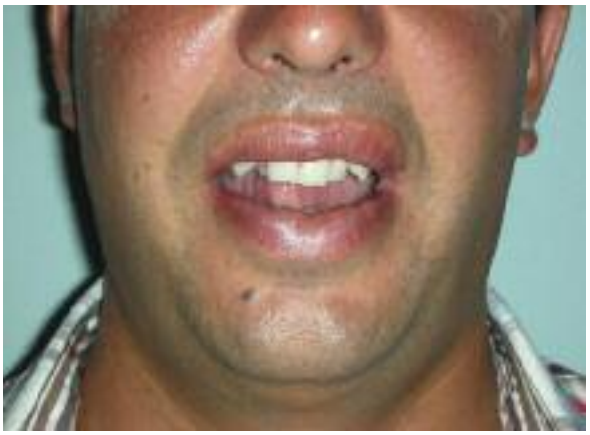

**Figure 3.** Same patient. A 12-month follow-up photograph showing good esthetic result (He becomes overweight in these months).

and blepharocalasis was reported in 1902, but the first association of these findings with thyroid enlargement was notes in 1920 by Ascher[14]. However, goitre may be evident in only 10% to 50% of patients[5-15].

The association of congenital double lip with bifid uvula[2], cleft palate[16] and cheilitis glandularis has been described[17,18].

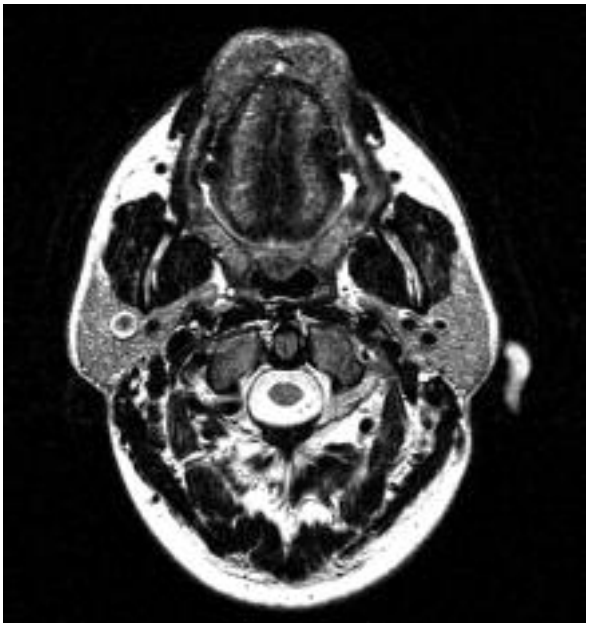

**Figure 2.** MR images depict the upper lip of the patient. Transverse fast spin-echo T2-weighted MR images (5,000/102; echo train length, seven; matrix size, 256 × 256; field of view, 150 × 200; section thickness, 3 mm; two signals acquired were obtained; acquisition time, 4 minutes); in the upper lip the presence of hyperplastic tissue with homogeneous iso-intense signal is clearly visible.

Parmar and Muranjan[19] have reported a case of a 21-year-old male with double upper and lower lip, hypertelorism, unilateral ptosis, blepharophimosis, broad nose with broad nasal tip, highly arched palate and bilateral third finger clinodactyly. Also a case of congenital DB associated to hemangiomas was reported[8].

The differential diagnosis should include vascular tumors, lymphangioma, angioedema, cheilitis glandularis, cheilitis granulomatosis, Miescher syndrome, mucocele, salivary gland tumours, infiammatory fibrous hyperplasia, sarcoidosis and plasma cell cheilitis[2]. In particular we believe is important to make a differential diagnosis with cheilitis glandularis, because it has been associated with an increased risk of the development of the squamous cell carcinoma[17].

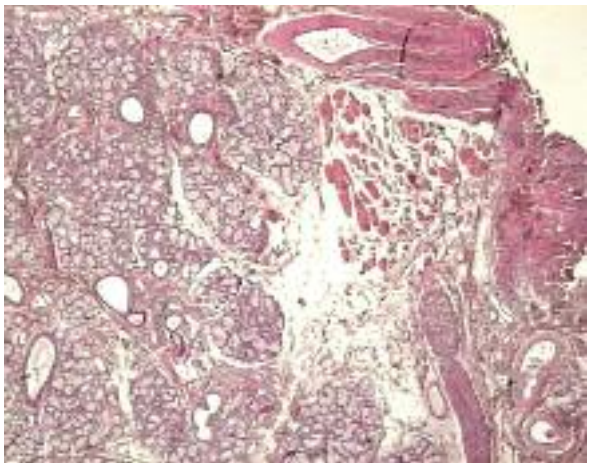

**Figure 4.** Microscopic aspect (hematoxylin and eosin, original magnification 20 ×).

In more than 80% of cases, Ascher's syndrome manifests itself before the age of 20[4]. In the present case, because the patient reported the increasing of the lip enlargement and blepharocalasis since he was older than 20 years old and because the absence of the goitre we preferred to propose him a MRI in order to determinate the nature of the swelling and to get a differential diagnosis.

Apart from a deformity that interferes with the mastication and the speech, a surgical treatment may be indicated for cosmetic reasons. Various surgical techniques to correct the DB have been described: w-plasty[10,22], "midmoon"[23] incisions, electrosurgical excision[24], triangle incision[25] or an elliptical excision on each side, combined with a vertical midline Z-plasty to release the central constriction[21]. However, several Authors suggest an elliptical incision[1,7,26].

Recurrence has not been observed in congenital forms[12], but sometimes it can happen in acquired ones[2]. In our case, no recurrence occurred in a year of follow-up.

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