

Primary anatomic reconstruction in upper and lower lips: case report

Reconstrução anatômica primária em lábios superiores e inferiores: relato de caso

Reconstrucción anatómica primaria en labio superior e inferior: reporte de caso

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Abstract

Extensive lip injuries reconstructions require a strategy of treatment. First, the strategy can follow the anatomical references in order to closure the injury reestablishing the lip functions. This article report a reconstruction of an extensive lip injury after a convulsion and a fall in height in a male patient. The lip reconstruction by anatomical reconstruction was effective for immediate structural maintenance and allowed a favorable healing for the second surgical stage.

Descriptors: Lip; Wounds and Injuries; Surgery, Oral.

Resumo

Reconstruções extensas de lesões labiais requerem uma estratégia de tratamento. Primeiro, a estratégia pode seguir as referências anatômicas, a fim de fechar a lesão restabelecendo as funções labiais. Este artigo relata uma reconstrução de uma lesão extensa de lábio após uma convulsão e uma queda de altura em um paciente do sexo masculino. A reconstrução labial por reconstrução anatômica foi eficaz para manutenção estrutural imediata e permitiu uma cicatrização favorável para o segundo estágio cirúrgico.

Descritores: Lábio; Ferimentos e Lesões; Cirurgia Bucal.

Resumen

La reconstrucción extensa de los labios requiere una estrategia de tratamiento. Primero, la estrategia puede seguir referencias anatómicas para cerrar la lesión restaurando la función del labio. Este artículo informa sobre la reconstrucción de una lesión labial extensa luego de una convulsión y una caída de altura en un paciente masculino. La reconstrucción del labio mediante reconstrucción anatómica fue efectiva para el mantenimiento estructural inmediato y permitió una curación favorable para la segunda etapa quirúrgica.

Descriptorios: Labio; Heridas y Traumatismos; Cirugía Bucal.

INTRODUCTION

The lips play an important dynamic for aesthetics and functional aspects, as well as communication, sound production, facial expressions, swallowing and preservation of lip sealing^{1,2}. Extensive lip injuries are a challenge for surgical reconstruction due to the need to reestablish the lip competence and many approaches or procedures can be performed³. And even minor lip defects require meticulous reconstruction to minimize injury defects because the lips are within the field of observation of the face⁴. Some lip injuries cause significant aesthetic and functional impairment, especially when affecting the skin, lip vermilion mucus, orbicularis muscle and oral mucosa can compromise speech, feeding, mimicry, and expression⁵.

Strategies for reconstruction of these injuries should aim at restoring anatomical and oral functions, as well as the satisfactory restoration of aesthetics, being fundamental for a better quality of life^{4,6-8}. In lips reconstructions, tissue loss and postoperative limitations should be considered^{7,8}. This article describes a case of lip laceration upper and lower limb caused by falling of its own height.

CLINICAL CASE

A 59-year-old male patient was referred at the Hospital (Santa Casa de Misericórdia de Araçatuba, SP, Brasil) with a history of convulsion and a fall in height, resulting in extensive laceration of the upper and lower lips (Figure 1). The lip injury of total thickness, involvement of the buccal

commissure, partial avulsion of the vermilion of the upper lip and laceration of the lower lip on the right side (Figure 2).



Figure 1: Lip injuries in commissure, upper and lower lip on the right side. Appearance after lip hemostasis.



Figure 2: Initial reposition and suturing of the muscular plane.

After the initial treatment, without further alterations, the lip injury was cleaned and direct closure in the anatomical references (Figure 3). The aesthetic result presented after 30 days revealed a cicatricial contracture, mucocutaneous misalignment and lack of lip vermilion in the region of the right buccal commissure and lip incompetence (Figure 4). The labial functions as speech, mimicry, feeding remained with some limitations. In view of the above, the patient will undergo secondary surgery to correct the resulting deficiencies.



Figure 3: Immediate appearance after lip reconstruction.



Figure 4: Postoperative aspect after 120 days.

DISCUSSION

The treatment of lip injuries requires delicate and planned manipulation to minimize possible sequelae³. In some cases, the loss of substance offer greater difficulty in reconstruction, requiring specialized techniques such as specific flaps or even grafts⁷⁻⁹. Lip reconstructions can be performed by simple or dynamic techniques and the identification of anatomic references such: mucosal, cutaneous, muscular. The anatomical references during reconstruction is fundamental for quality in aesthetic and functional restoration^{1,2}.

In this case report, the authors choose the primary closure technique. This technique had the objective of co-optation the edges of the wound, controlling the bleeding and repositioning the flap¹⁰. Small lip defects can be treated very well through a simple primary closure with excellent aesthetic results⁹. However, the direct closure can provide

good functional and aesthetic results in extensive lip injuries¹.

In large defects it is necessary to guide through the anatomical planes to avoid sequelae.¹ In this cases, it is important to evaluate the extent of tissue loss because the correction of postoperative defects may be necessary through secondary surgery². In this specific case, the primary anatomical closure technique was effective for immediate structural and allowed a favorable healing for the second surgical stage and the patient did not want to perform a new surgical procedure.

Defects involving the commissure require careful planning and, in some cases, late reconstruction will be necessary¹¹. Many techniques are described in the literature for reconstruction of these defects and offer good results, restoring function and aesthetics¹²⁻¹⁴.

CONCLUSION

Although the correction of postoperative defects is necessary through secondary surgery, in this specific case, the primary anatomical closure technique was effective for immediate structural maintenance and allowed a favorable healing for the second surgical stage.

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CONFLICTS OF INTERESTS

The authors declare no conflicts of interests.

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