CASE REPORT

Maxillary labial frenectomy using electrocautery along with scalpel technique: A case report

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Abstract

The frenum is a mucosal membrane fold that binds the alveolar mucosa, gingiva, and the underlying periosteum to the cheek and lips. When attached to them near the margin of the gingiva, the frena is likely to jeopardize the gingival health, possibly due to conflict with the control of the plaque or due to muscle pull. The maxillary frenum can pose esthetic problems compared to this. In the case of midline diastema, orthodontic outcomes are impaired, thereby causing a recurrence after treatment. This paper provides a case study on the success of maxillary labial frenectomy in electrocautery patients with scalpel technique.

Keywords: Alveolar mucosa, electrocautery, frenectomy, frenum, scalpel

Introduction

A mixture of epithelium and loose connective tissue is the superior labial frenum, a triangular shaped fold that ties the tubercle of the upper lip to the alveolar process.¹² As a post-eruptive remnant of the electolabial bands, the maxillary labial frenum forms. As 2 central incisors erupt widely apart, no bone is deposited below the frenum.³ An irregular connection to the frenula are evident.³ Often blanch test is done for diagnosis of high frenal attachment. Abnormal frenal attachment is treated by frenectomy. Frenectomy can be done by conventional method using scalpel, electrocautery as well as with lasers. In the present article, we had gone for maxillary labial frenectomy using electrocautery along with scalpel technique.

Case Report

A 8-year-old female patient came to the department with the chief complaint of space in-between the upper front teeth. The patient gave a history of thick flap present in between the upper front teeth from childhood. Medical history was non-contributory. After thorough clinical evaluation and detail history, it was decided to go for frenectomy using electrocautery along with surgical technique.

Discussion

Mirko et al.⁴ noticed that periodontal situation is influenced by certain forms of maxillary frenum. In case scenarios of gingival, papillary, and papillary penetrating types of maxillary frenum attachment, the periodontal resistance was substantially lower in individuals with pathological changes in the papilla compared to individuals with the same form of attachment but with
stable papilla. For a hypertrophic labial frenum, a frenectomy is generally recommended when the frenum causes diastema and if the frenum makes oral hygiene challenging.[5] In the present case, we excised the frenum by electrocautery at the visible region (frenal attachment from interdental papilla until the mucogingival junction) to preserve the esthetic as the patient had a high smile line and to reduce the fear in the patient as bleeding
is less compared to the scalpel technique. Scalpel technique was followed in the deeper vestibule to prevent greater tissue damage in the interior aspect and for faster healing.

**Conclusion**

Combined use of electrocautery and conventional technique has a very good prognosis in the management of high smile line maxillary labial frenectomy cases where esthetics at the visible region and healing at the deeper vestibule are required.

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