



LINGUAL FRENECTOMY AND THE IMPORTANCE OF MANAGEMENT IN CHILDREN

Management

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ABSTRACT

The lingual brake is constituted, substantially, by richly vascularized connective tissue, which comprises the superior fibers of the genioglossus muscle. If it is dysfunctionally short or anterior, ankyloglossia is characterized, which hinders somatic functions such as feeding, swallowing, speech and, in newborns, breastfeeding. Thus, the use of an adequate protocol for the diagnosis, including exams of clinical and functional aspects of the tongue, may help for later surgical indication. The objective of this case report is to highlight the importance of the correct diagnosis using the Marchesan classification, as well as the indication of surgery according to age and, maximally, physiological factors, these resulting from ankyloglossia.

KEYWORDS

tongue frenulum lingual, classification, infant behavior, management.

INTRODUCTION

The lingual brake is a median fold of mucosa that connects half of the sublingual surface to the floor of the mouth, allowing free movement of the tongue. According Fujinaga et al (2017), it is constituted by fibrous connective tissue and also by superior fibers of the genioglossus muscle, this anatomical structure has a categorical role in sucking, swallowing and phonation. Pompéia et al (2017), declare the short tongue brake in children both hinders the movements of the tongue and impairs breastfeeding, sucking, chewing, swallowing and the production of speech sounds.

According Alves et al (2018), in newborns, the curb extends from the tip of the tongue to the base of the alveolar process of the mandible. Throughout the development of the organism, the lingual brake recedes due to the apical growth of the tongue so that, in children between 2 and 5 years old, the tip of the tongue extends far beyond the brake.

Walsh & Tunkel (2017), declare the patient with ankyloglossia is unable to project the tongue over the incisors, nor to interconnect it with the hard palate.

According Zen et al (2019), pediatric doctors, because they establish initial contact with babies, are in a better position to verify the diagnosis.

According Block (2012), the indication for surgery is directly involved with the anatomical complexity of the region and the functionality of the tongue. According O'Shea et al (2017), this procedure is called frenotomy, when a frenulum incision is made, or frenectomy, when a frenulum excision occurs.

The objective of this work is to report a clinical case of a short and anterior lingual brake, from the realization of its diagnosis to the surgical intervention directed to pediatric dentistry, so as not to delay the normal development of soft oral tissues, guiding the patient's behavior regarding future treatments.

CASE STUDY

The patient F. H. S. M., 07 years old, male, accompanied by his parents to the Faculty of Amazonas - IAES -, complained of oral inaccuracies and defective tongue mobility. During the anamnesis, the father reported the child's difficulty in relating during some school activities because of the lack of good articulation of the language. However, no swallowing problems have been reported. According to the patient's medical history, everything appeared to be normal.

In the clinical examination, a great limitation in the patient's lingual elevation was observed, as he was unable to contact the palate. In the protrusion movement, the tongue was bifid (Fig. 1). Therefore, it was confirmed that the patient exhibited difficulties in speech associated with limited movement. After the clinical examination, a short and anterior lingual brake was diagnosed, whose treatment should be surgical removal.



Figure 1: clinical aspect

Sources: the author

Extraoral antisepsis was performed with 0.2% chlorhexidine and 0.12% intraoral. The anesthetic, infiltrative technique, using 3% lidocaine (1.5 tubes), was performed bilaterally in the lower alveolar nerve and infiltrating close to the brake and at the tip of the tongue (Fig.2).



Figure 2: Infiltrative anesthesia

Sources: the author

The extension of the brake did not allow the use of the tentacula, so transfixation with 3-0 silk thread was performed, keeping the tongue in

an upper position. (Fig. 3)



Figure 3: Transfixation of the tongue with silk thread
Sources: the author

After the incision, tissue divulsion was imperative with straight blunt surgical scissors (Metzenbaum scissors) (Fig. 4). Before the suture, free movements were performed with the tongue to confirm its release.



Figure 4: Divulsion of the fabric with Matzenbaun scissors.
Sources: the author

The father and the patient received postoperative recommendations about the correct diet, care for personal hygiene, and the need to stimulate speech. Preservation was performed after 15 days, in which satisfactory healing and adequate tongue movement were observed (Fig. 5).



Figure 5: Prosvoration
Sources: the author

CONCLUSIONS

According Silva et al (2017), the lingual brake may present anomalies in its development which hinder the movement of the tongue and prevent contact with the hard palate and the lingual surface of the upper anterior teeth.

The child's speech, movement, swallowing, and even social conduct are injured due to this anomaly, which requires surgical intervention. Alterations caused by ankyloglossia are not uncommon, which raises the importance of the pediatric dentist's role not only in the correct diagnosis, but also in the appropriate anamnesis.

However, it is quite common to observe the difficulty in diagnosing ankyloglossia, as the medical-dental literature does not have a definitive protocol for correct diagnosis. Depending on the clinical case presented, the surgical technique of frenectomy brought benefits to the movement of the tongue, to the orofacial functions, and to oral communication, whose postoperative period was favorable, painless and without recurrence. The management used therefore provided the patient's cooperation, which justifies the studies on the management

techniques applied to the clinical scenario.

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