LINGUAL FRENOTOMY IN A PAEDIATRIC ANKYLOGLOSSIA AND LASER TREATMENT: A CLINICAL CASE REPORT

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I. INTRODUCTION

Ankyloglossia refers to a reduced mobility of the tongue caused by a restrictive lingual frenulum. This condition may lead to breastfeeding difficulties, such as painful latch or poor weight gain, as well as articulation and occlusion problems. Frenotomy or frenectomy are the most common therapeutic approaches and can be performed with or without laser technology.

II. AIM

To describe the clinical outcome of laser frenotomy in a pediatric patient with ankyloglossia.

III. CASE DESCRIPTION

A 6-month-old female infant, exclusively breastfed, presented with poor weight gain, breastfeeding difficulties, and signs of sucking-swallowing discoordination, including gulping and choking episodes during feeding (Figure 1). Oral evaluation showed poor vacuum maintenance and a posteriorized tongue position. A type 3 lingual frenulum was identified (according to Coryillo's classification), with a score of 5 on the Bristol Tongue Assessment Tool, indicating significant functional restriction (Figure 2).

Laser frenotomy was performed using a diode laser (SiroLaser Blue, 970 nm, continous wave mode with repeated pulse settings: 1,0 W power , used 445 nm wavelength) suitable for children frenectomy (Figure 4). The procedure was carried out under sedation with sevoflurano, admnistered by a paediatric anaesthetist. Topical anesthesia was not necessary for the procedure. The procedure lasted 5 minutes and was followed by rectal administration of paracetamol. The intervention and recovery were uneventful, with improved tongue function post-treatment (Figure 3).

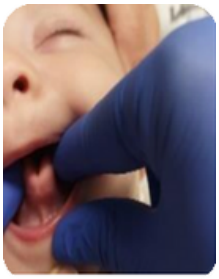

Fig. 1 Pre-frenectomy

Fig. 2 Immediate result afterfrenectomy

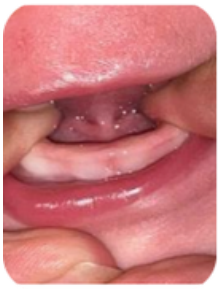

Fig. 3 2 months post-treatment

Fig. 4 Dio laser suitable for children frenectomy

IV. DISCUSSION

Laser frenotomy resulted in significant functional improvement with no complications. This technique proved to be safe and effective.

V. CONCLUSIONS

Laser frenotomy/frenectomy should be considered a therapeutic option, especially in pediatric patients, due to its effectiveness, higher parental acceptance, and lower risk of postoperative complications.

REFERENCES