

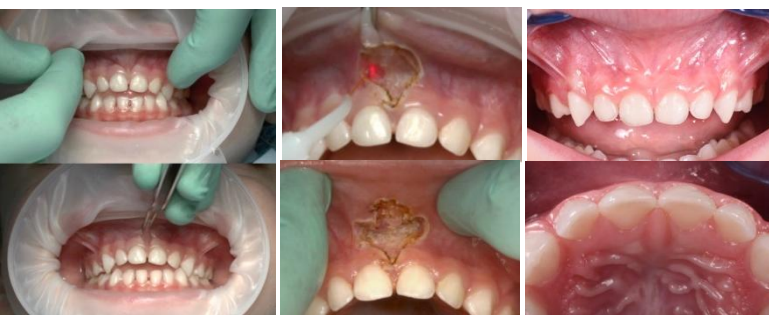
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## EARLY INTERCEPTIVE TREATMENT OF SKELETAL CLASS III OPEN BITE WITH SHORT LABIAL FRENULUM IN A 3-YEAR-OLD PATIENT: CASE REPORT

**AIM:** Interceptive orthodontic therapy is based on treatment during the most active phase of patient's skeletal and dental growth aimed at influencing it and removing functional disorders underlying the onset of malocclusions. The aim of this work is to highlight the importance of the early treatment of pathological frenulum and associated malocclusions, since the first years of life, using minimally invasive surgical techniques and atraumatic devices capable of developing light, biological, and functional forces as those used in elastodontic therapy AMCOP.

**MATERIALS AND METHODS:** A three year-old patient with hereditary class III, anterior open-bite, left deviation of the lower midline and upper short labial frenulum, after L.A. infiltration with 2% mepivacain (adrenaline 1:100.000), was submitted to frenectomy with V-shaped incision through diode laser (LASOTRONIX Smart M Pro 980nm-10W with 320 micron and 3.0 W power contact fiber) used in continuous mode. No surgical sutures were required due to the haemostatic effect of the laser. Topical gel applications with chlorhexidine 2% were prescribed twice a day for 1 week and at the same time the elastodontic AMCOP TC was used every night and one hour during the day. First follow-up was carried out 1 month after surgery.



**RESULTS:** After surgery the healing occurred by second intention without pain and discomfort for the patient. At the same time, after 6 months of elastodontic therapy, the face symmetry was recovered with re-centering of the midline, closure of the open-bite and skeletal class III improvement.

**CONCLUSIONS:** Laser surgery of short frenulum is an excellent therapeutic option compared with the classical surgical blade technique; it greatly reduces the intra- and post- operative discomfort resulting in better compliance even by very young patients. In addition, the elastodontic AMCOP TC device has demonstrated the ability to early intercept the malocclusion allowing the recovery of a proper growth and bite closure through the use of an appliance with a simple design, capable of developing light, elastic and biological forces well tolerated by young patients.

### REFERENCES

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