



## 1. ABSOLUTE ANCHORAGE BY ORTHODONTIC IMPLANTS IN THE TREATMENT OF DIFFERENT DENTAL MALPOSITIONS. CASE REPORT

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**Introduction.** Absolute anchorage using orthodontic implants represents a new orthodontic paradigm and is perhaps the most important advancement in recent times, as it provides orthodontics with the principle of "action without reaction," virtually eliminating Newton's third law. Microimplants are screws that are inserted into the jaw and serve as a support for the movement of the teeth that need to be corrected during orthodontic treatment.

**Case statement.** Patient C. L., 14 years old, diagnosed with Angle class I dento-maxillary anomaly, associated with upper and lower incisor-canine crowding, deep occlusion degree 1 in the frontal region, ectopy and entopia in the frontal region, dolichocephalic growth, the patient suffering from sdr. Marfana. The treatment plan was made thanks to the thorough examination: photostatic examination, orthopantomography, telerradiography, intraoral scanning and study models. The patient benefited from orthodontic treatment with the self-ligating Damon System/ Damon Q technique. During the orthodontic treatment stage, the retention of d. 47 was confirmed by OPG. The extraction of d. 48 was performed. After 4-6 months, a Vector Tas 10mm x 2mm orthodontic mini-implant was inserted in the retromolar region. The button was also fixed on d. 47 the distal surface. Orthodontic forces were applied on the same day. After 2 months, the button was reattached in the mesial region of d.47, and the position of the mini-implant was not changed. No complications were observed after orthodontic implant insertion.

**Discussions.** The malposition of tooth 47 was corrected with the help of the orthodontic mini-implant, later its alignment was realized using the self-ligating Damon System/ Damon Q technique. The orthodontic mini-implant treatment lasted approximately 8 months.

**Conclusion.** Orthodontic implants used as absolute skeletal anchorage in orthodontic treatment contribute to obtaining faster results in terms of time and effectiveness. The insertion technique is quick and painless.