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Diode Laser: the "Gold Standard" for aesthetic gingival recontouring during and post orthodontic treatment

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AIM: to solve gingival hyperplasia present in the maxillary anterior area due to orthodontic treatment and to obtain an aesthetic improvement on different smile principles in orthodontic patients by using a soft-tissue diode laser.



Before laser procedure: probing depth 5 mm



Laser procedure



One week after laser procedure: probing depth 1 mm



MATERIALS AND METHODS: A study group of 15 Caucasian subjects with a mean age of 15.4 years, who were fitted with SWM, were selected. Probing depths were recorded to determine the biologic width. A diode laser (Sweden&Martina, Due Carrare PD, Italy) 810 nm, with a 300- μ m quartz fiber, the power setting of 1.2W, was used for a total of 15 minutes on the anterior teeth.



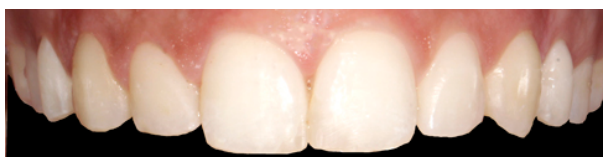
Before laser procedure



Laser procedure



One week after laser procedure



RESULTS AND CONCLUSIONS: The before and after pictures reveal an aesthetic improvement on different smile principles: the golden proportion of the anterior six teeth, size and length on the centrals, axial inclination, gingival symmetry, gingival contour and zenith. The diode laser has excellent ability to cut accurately and control hemostasis, yet has poor absorption by tooth.

REFERENCES

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