

Diode Laser (980 nm) as Adjunct to Scaling and Root Planing

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ABSTRACT

Objective: The aim of this study was to evaluate clinical efficacy of InGaAsP diode laser as adjunct to traditional scaling and root planing. **Background Data:** The use of laser is one of the most recent methods in non-surgical periodontal treatment. Efficacy and side effects of each type of laser treatment have yet to be determined. **Methods:** Thirty patients suffering from moderate periodontal disease have been considered. They were randomly selected to undergo either scaling and root planing with curets, or scaling and root planing combined with InGaAsP laser (980 nm and 2 W). The papilla bleeding index (PBI), bleeding on probing (BOP), and clinical attachment level (CAL) were registered at the beginning and end of treatment. **Results:** At the end of treatment, PBI average in the group treated with laser was 0.24 versus 0.43 in the group under conventional treatment ($p = 0.014$). In the group undergoing scaling and root planing, BOP decrease is 19.55% less ($p < 0.0001$) than in the group also treated with laser. Nevertheless, CAL differences cannot be considered significant between both groups ($p = 0.67$). **Conclusions:** Scaling and root planing in combination with laser produce moderate clinical improvement over traditional treatment.