

1st Meeting of the South American Division of WFLD
5th Congress of the Brazilian Association for Lasers in Dentistry (ABLO)
23 and 24 October 2009

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EFFICACY OF Nd:YAG LASER ASSOCIATED WITH SCALING AND ROOT PLANNING IN CLASS II FURCATION

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The purpose of this clinical trial, randomized, double-blinded was to evaluate the bacterial reduction and the clinical improvement achieved with the Nd:YAG associated to conventional treatment on furcation sites from 31 patients. The Control (C) group underwent twice manual and ultrasonic root debridement in weekly intervals. The Test (T) group received the same treatment followed by the Nd:YAG laser irradiation (100mJ/pulse;1.5W;15Hz;60sec,141.50J/cm²). The clinical parameters were evaluated before, immediately, 1, 3 and 6 months after the treatment and the microbiological parameters were evaluated before, immediately, 1, 3 and 6 months after the treatment. A Colony Forming Unit (CFU) total bacteria number significant reduction was showed for both groups immediately after but it was significant higher for the T group. After 1 and 3 months, an increase was observed, however not reaching the initial levels for both groups. At the 6 months an increase almost equal to baseline levels in T group was showed, while the C group still similar to the 3 months results. The CFU of dark pigmented bacteria and the percentage values of patients with the studied bacteria reduced after the treatment and returned to values close to the initial ones 6 months after for both groups. The clinical parameters reduced throughout the study with no difference between them, and for gingival recession an increase was noted throughout the study without significant difference between the groups. The Nd: YAG laser associated with scaling and root planning promoted bacterial reduction on class II furcation immediately after its application, although this reduction was not observed 6 months after and that both treatments promoted improvements of most clinical parameters throughout the study. Acknowledgements: FAPESP: 05/56384-5.