

Effect of low-intensity laser on periapical lesions in endodontically treated teeth. Egyptian Dental Journal, 47 (3): 1265-1276, July, 2001.

**Abstract:**

Low-intensity lasers have been recently recommended in treatment of periapical lesions. It has shown to have bone regeneration activation effects in treatment of periapical lesions, but the true efficacy of this modality is controversial and the exact mechanism of action is still unknown. The objective of the present study was to evaluate clinically and radiographically, the healing potentiality of periapical lesions in endodontically treated teeth following laser application. Forty patients diagnosed to have periapical lesions were included in this study. Intra-oral direct digital radiographs to assess bone regeneration were used to evaluate the operated sites. No significant difference was found in the rate of density changes in all postoperative intervals compared to the immediate postoperative data in both lased and unlased groups ( $P < 0.001$ ). Also no significant difference was found in-between the members of lased groups ( $P < 0.005$ ). It can be concluded from the results of the present study that low intensity laser irradiation during and after Endodontic treatment can be employed as a supplement that may help post-operative healing in some cases only. The factors that govern

the success of these LLLT healing enhancement processes still need to be studied and understood.