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J Dent Anesth Pain Med. 2019 Jun;19(3):159-165. doi: 10.17245/jdapm.2019.19



## Painless injections-a possibility with low level laser therapy.

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### Abstract

**BACKGROUND:** Dental **procedures** commonly involve the injection of local anesthetic agents, which causes apprehension in patients. The objective of dental practice is to provide painless treatment to the patient. The purpose of this study was to evaluate the effect of Low Level **Laser Therapy** (LLLT) in reducing the pain due to local anesthetic injection.

**MATERIALS AND METHODS:** A prospective, split-mouth study was conducted on 25 patients. In Condition A, LLLT was administered followed by the administration of a standard local anesthetic agent. Patients' perception of pain with use of LLLT was assessed based on a Visual Analogue Scale (VAS). In Condition B, LLLT was directed to the mucosa but not activated, followed by the administration of local anesthesia. VAS was used to assess the pain level without the use of LLLT.

**RESULTS:** Comparison between Condition A and Condition B was done. A P value < 0.001 was considered significant, indicating a definite statistical difference between the two conditions.

**CONCLUSION:** In our study, we observed that LLLT reduced pain during injection of local anesthesia. Further multi-centric studies with a larger sample size and various modifications in the study design are required.

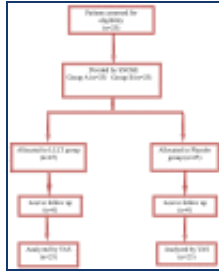
**KEYWORDS:** Injection; Low Level **Laser Therapy**; Pain; Photobiostimulation

PMID: 31338422 PMCID: [PMC6620536](#) DOI: [10.17245/jdapm.2019.19.3.159](#)

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