

ANXIETY AND VITAL SIGNS CONTROL USING ILIB: A PILOT STUDY

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Intravascular laser blood irradiation (ILIB) is a promising therapy for controlling anxiety and vital signs, however, to date, there are no investigations of this therapy in controlling dental anxiety and vital signs. This case report is a pilot study that aimed to evaluate the physiological changes and anxiety state of a patient submitted to third molar extraction, in which was performed ILIB. A female patient, eighteen years old, healthy, was referred to the dental clinic school with an indication of upper third molar extraction. The analysis of the panoramic X-ray showed that the tooth was in vertical angulation and depth level C according to Winter's classification. The ILIB was performed immediately before the extraction, and the parameters were red light, 660nm, and 100mW of power, the laser was positioned, with the aid of a bracelet, on the radial artery for 30 minutes. The vital signs saturation, blood pressure, and heart rate were assessed before and after four minutes of the local anesthesia. The emotional state, assessed by the STAI-Y questionnaire, was assessed before the ILIB and after four minutes of local anesthesia. Before the ILIB, the saturation was 99%; blood pressure was 120/70mmHg; heart rate was 74 bpm; and the STAI-Y scale had a total score of -17. After 4 minutes of anesthesia, the variables were analyzed again, blood saturation stayed stable reaching 99%; the blood pressure was 110/70mmHg. There was an increase in heart rate, after the anesthesia this vital sign was 86 bpm. The STAI-Y scale varied three points and reached a score of -14. The present case report may suggest that ILIB may promote vital signs and anxiety stabilization during third molar extractions, since lightly changes in their values were observed, mainly in the heart rate. Therefore, ILIB may present a beneficial role in maintaining vital signs and controlling anxiety. This study is of an exploratory nature and will be used to provide information to help in the design of future studies.

Keywords: Laser Therapy; Low-Intensity Light Therapy; Dental Treatment Anxiety.

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