

Effects of low level laser therapy versus corticotherapy on pain, trismus and edema after mandibular third molar surgery.

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Objective: Low-level laser therapy (LLLT) is a treatment commonly used in oral surgery for biostimulation. The aim of this study was to compare the effects of LLLT and corticosteroids on postoperative pain, trismus and edema following surgical removal of mandibular third molars.

Background data: LLLT and corticosteroids have been effective in reducing pain, trismus and edema; thus improving the quality of patients' lives.

Patients and methods: Sixty patients who were to undergo surgical removal of their lower third molars were studied. They were randomly assigned to two groups of thirty patients each. A diode laser device (Whitening lase II) with a continuous wavelength of 808 nm and a maximal output power of 100 mW was used. Patients in the LLLT group received 3.3 J (fluence of 120 J/cm²) intraorally at the operation site and the same dose extraorally. Patients in the corticosteroids group received postoperative parenteral injection of Dexamethasone. Pain, interincisal opening and facial swelling were evaluated on the third and seventh postoperative days.

Results: The levels of pain, trismus and facial swelling at the third and seventh postoperative days were lower in the corticosteroids side than in the LLLT side, though without statistically significant differences except for edema at seventh postoperative day.

Conclusion: This study demonstrates that there is no significant difference between administration of corticosteroids and LLLT for the reduction of postoperative pain and trismus but dexamethasone was more effective to reduce swelling on seventh postoperative day.

Biography

Belkacem Chebil Raouaa has completed her PhD at the age of 25 years from Monastir University and postdoctoral studies from the same university. She is now an Assistant Professor in oral medicine Oral Medicine Oral Surgery. She has published few papers in reputed journals .

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