

PHOTOBIOMODULATION AFTER THIRD MOLAR EXTRACTION: A SYSTEMATIC REVIEW FOR COST-EFFECTIVENESS PROTOCOL

Authors: Thalita Molinos Campos, Sandra Kalil Bussadori, Anna Carolina Ratto Tempestini Horliana, Kristianne Porta Santos Fernandes, Lara Jansiski Motta.

Universidade Nove de Julho

Abstract:

One of the most performed procedures in dentistry is the extraction of third molars, a surgery that causes a lot of discomfort to patients, with pain, edema and trismus due to surgical trauma. To reduce these negative post-surgical effects, anti-inflammatory drugs are prescribed after extraction, but these drugs can have unwanted effects. Photobiomodulation is a technique to modulate inflammation, accelerate tissue repair and also reduce pain and discomfort in different clinical situations, using low level laser therapy and LED (light emitting diode). Thus, the present study aims to carry out a Systematic Review of extraction in third molars with photobiomodulation, followed by a meta-analysis to assess cost-effectiveness. For the systematic review and meta-analysis, studies published between 2005 and 2020 will be selected. Searches will be conducted through the international databases PubMed, Web of Science and MEDLINE. It will be used the search terms "third molar", "phototherapy", "dental extraction", "laser therapy", "third molar extraction", "photobiomodulation", "third mandibular molar", "third molar surgery", "low level laser therapy" AND "wisdom tooth removal". The cost-effectiveness establishes whether or not a treatment should be implemented as a therapeutic measure, being calculated by the difference between the cost of two interventions proposed as treatment divided by the difference between its consequences (effectiveness). The costs will be based on the values with the treatment with the laser and with the use of anti-inflammatory, having as outcome measure pain (visual analog scale) and trismus (mouth opening-mm). This protocol is registered in PROSPERO CRD42018105658.

Biography:

Thalita Molinos Campos is a dentist, graduated from Universidade Nove de Julho (UNINOVE). When she graduated, she won the João Sampaio Doria award, from the Regional Council of Dentistry, as the best student in the university's dentistry course. She did residency in Primary Health Care and Family Health, working with health promotion and prevention projects, aimed at the population in social vulnerability. He attended a master's degree in Biophotonics Applied to Health Sciences also at UNINOVE, with works focused on photobiomodulation in Oral Mucositis and breast cleft. Today he is pursuing a doctorate within the same program. She is a collaborating professor in the Dentistry course, within the disciplines of the health promotion nucleus, at the same university.