

The use of diode laser as a treatment modality for impacted mandibular wisdom among patients in Taif University, KSA

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The objective of this study was to assess the use of diode laser for surgical removal, and reducing the bacterial concentration around impacted lower wisdoms. Patients under study were 50 patients aged (19-35 years), they were divided into two equal groups; the first was the control group; patients were subjected to conventional surgical treatment and the second was the study group; in which patients were treated with diode laser. Clinical follow up for post-operative pain, edema, and dry socket incidence, as well as bacterial isolation, and identification of Colony Forming Units (CFU), were done at the following post-operative periods; 1st, 3rd, 5th, and 7th days of operation. Results showed marked reduction in the number of patients presenting with post-operative edema in the study group throughout the follow up period. Similarly the pain was much less in the laser group than the control group. The incidence of dry socket decreased in the study group if compared to the control one. Bacterial isolated species were facultative anaerobic as (*Staph. aureus*, CNS, *Strept. viridans* and mutans), while anaerobic were (Prevotella, Fusobacterium, Actinomyces, Bacteriodes, and Lactobacillus species). The main growth degrees were 100, 80, 50, and 30% for 1st group, and 100, 50, 30, and 20% for 2nd group respectively. CFUs/ml resulted in 1st group as 3. 2, 2. 9, 2. 3, and 1. 9x10⁴/ml, but in 2nd group were 3. 1, 2. 4, 1. 7, and 1. 1x10⁴/ml. While the CFU/ml differences between 1st and 2nd group were 0. 1, 0. 5, 0. 6, and 0. 8 respectively. In conclusion, laser treatment decreases post-operative discomfort and aided reduction of CFU.

Biography

Mahitab M Soliman has completed her PhD degree in Oral and Maxillofacial Surgery in 1990, from Alexandria University, Faculty of Dentistry. She is working now as a Professor of Oral Surgery in Taif University, KSA & is Supervisor of Outpatient Dental Clinic. She has several publications in international journals and she is a reviewer in Qassim International Journal of Health sciences. Her work is concentrated on the use of soft tissue lasers in different surgical procedures. She was course director for Oral Surgery for several years, and she gave several courses for Oral surgery Diploma and Master post graduate students in Alexandria University, Faculty of Dentistry.

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