

Pain management after complex maxillary third molar removal

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Objectives: The aim of this study was to identify the best pharmacologic and physical agents' treatment modalities after difficult maxillary third molar extractions, and to verify the benefits of single intra muscular dexamethason on postoperative pain, swelling and trismus.

Materials and Methods: Forty six maxillary third molars are extracted in 41 patients. Severity of surgical intervention was assessed using the Pall - Gregory Classification (only Class C was included). Third molar surgeries are performed using the rotatory osteotomy instruments. Group A (24 patients) received intra muscular application of 4 mg/1ml dexamethason one hour before intervention, after surgery cryotherapy was practiced for 15 minutes every half hour for 48 hours when the patient was awake and NSAID (Ibuprophen 400 mg and Paracetamol 250 mg). Group B (22 patients) received cryotherapy for 15 minutes every half hour for 48 hours when the patient was awake and NSAID (Ketoprofen 100 mg and Paracetamol 250 mg). The Visual Analogue Scale (VAS) was used to evaluate the severity of pain. Trismus, mouth opening ability and swelling was measured before surgical intervention, immediately after and 24 and 48 hours after surgical intervention. Three standard swelling measurements points are integrated: tragus-lip junction, tragus - pogonion and mandibular angle-external corner of the eye. Maximum Interincisal Distance (MID) was used to estimate trismus first and five days after surgery. Statistical analyses were performed using SPSS (v17. 0).

Results: Group A subjects demonstrated statistical significant difference ($p < 0.01$) in relation to swelling and pain; while, between the groups there was no significant difference in relation to trismus ($p > 0.05$). Age, gender, and concomitant disease did not have any significant impact on our research outcomes.

Conclusions: The use of dexamethason, cryotherapy and NSAID (Ibuprophen and Paracetamol) was found to be efficient in postoperative treatment of pain, swelling and trismus after complex maxillary third molar surgery.