

Efficacy of Corticosteroids versus Placebo in Third Molar Surgery: A Systematic Review of Patient-Reported Outcomes

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Abstract : Background: Third molar surgery is often associated with postoperative problems which cause serious impediments on daily activities and quality of life. Steroidal anti-inflammatory drugs may decrease these common post-operative complications. The purpose of this review is evaluating the available evidence regarding the efficacy of corticosteroids used as adjunctive therapy for patients undergoing third molar surgery. Methods: PubMed, Google scholar, Scopus, web of science, clinicaltrials.gov, scirus.com, Cochrane central register for controlled trials, LILACS, OpenGrey, centerwatch, isrctn, who.int and ebsco were searched without restrictions regarding the year of publication. Randomized clinical trials assessing patient-reported outcomes in patients undergoing surgical therapy, were eligible for inclusion. Study quality was assessed using the CONSORT-checklist. No meta-analysis was performed. Results: A total of twelve Randomized Clinical Trials were included in this study. Methylprednisolone and Dexamethasone may decrease postoperative side effects such as pain, trismus and edema. Based on the results both of them could improve patients' satisfaction, and there is no significant difference between these two types of corticosteroids regarding the patient centered outcomes ($p > 0.05$). Intralesional and intravenous injection of Dexamethasone showed an equivalent result, with statistically significant better results ($P < 0.05$) in comparison with the oral treatment. Conclusion: various types of corticosteroids can enhance the patient's satisfaction following third molar surgery. However, there is no significant difference between Dexamethasone, Prednisolone and Methylprednisolone groups in this regard. Comparing the various administration routs, local injection of Dexamethasone is quite simple, painless and cost-effective adjunctive therapy with better drug efficacy.

Keywords : third molar surgery, corticosteroids, patient-reported outcomes, health related quality of life

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