FACULTY ABSTRACTS

F - 13: COMPARATIVE EVALUATION OF PREMEDICATION WITH KETOROLAC AND PREDNISOLONE ON POSTENDODONTIC PAIN: A DOUBLE-BLIND RANDOMIZED CONTROLLED TRIAL

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Introduction: The present clinical trial aimed to evaluate and compare the effect of a single pretreatment dose of ketorolac (20 mg), prednisolone (30 mg), and placebo on postendodontic pain in patients undergoing endodontic therapy for irreversible pulpitis or pulpal necrosis using a visual analog scale.

Methods: Ninety-two subjects were included in the present trial; 46 subjects had a pulpal diagnosis of irreversible pulpitis, and the other 46 had pulpal necrosis. These subjects were randomly allocated into 1 of the 3 pretreatment medication groups: ketorolac (20 mg), prednisolone (30 mg), or a placebo. The drugs were administered 30 minutes before the procedure followed by a routine single-visit root canal treatment. Preoperative and postoperative pain was evaluated using a visual analog scale at 6 time intervals. A comparison between the different groups was performed using one-way analysis of variance followed by the Tukey post hoc test. A comparison of pain within each group at various time intervals was performed using repeated measures analysis of variance followed by the paired t test and Bonferroni correction.

Results: At the end of 6 hours, in irreversible pulpitis cases, the ketorolac group showed an effective reduction in pain scores compared with the other drugs. At the end of 12 hours, the prednisolone group significantly reduced the pain scores compared with the other drugs.

Conclusions: From this study, it could be concluded that a single pretreatment dose of prednisolone has a more sustained effect in reducing postendodontic pain compared with placebo or ketorolac.