The Effect of Pretreatment with Ibuprofen and Dexamethasone on the Effect of Nerve Block Lower Alveolar Marked in Irreversible Pulpitis Teeth

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Abstract

Successful local anesthesia is the bedrock of pain control in endodontics. Pain control is essential to reduce fear and anxiety associated with endodontic procedure. It is believed that premedication with non-steroidal anti-inflammatory (NSAID) drugs before administering inferior alveolar nerve block (IANB) increases the success of anesthesia. The purpose of this study was to evaluate the effect of premedication with dexamethasone (SAID) and ibuprofen (NSID) on frequency of success of IANB in patients with symptomatic irreversible pulpitis. 75 emergency patients in severe pain diagnosed with symptomatic irreversible pulpitis of a mandibular posterior tooth randomly divided in 3 groups. Patients received, in a double-blinded manner, identical capsules of either 4mg dexamethasone or 400mg ibuprofen or starch powder 1 hour before the administration of the IANB. Access was begun 15 minutes after the completion of IANB. Success was defined as no or mild pain (Visual analogue scale recording) on access. The success rate for the IAN block was 80.8 % for the dexamethasone group and 73 % for the ibuprofen group, with no significant difference (P=0.337) between the 2 groups. The success rate was 38.5 % for placebo group that significantly lower than dexamethasone and ibuprofen groups (P=0.008). Preoperative administration of 4mg dexamethasone or 400mg ibuprofen 1 hour of the IAN block result in a significant increase in anesthetic success in mandibular molars with symptomatic irreversible pulpitis.

Keywords: Ibuprofen, Dexamethasone, Nerve Block, Pulpitis Teeth

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