

NEWSLETTER

Can premedication with an anti-inflammatory medication improve the depth of anesthesia during treatment of teeth with irreversible pulpitis?

A 2006 study by Modaresi et al compared the efficacy of ibuprofen, acetaminophen-codeine, and placebo premedication therapy on the depth of anesthesia during treatment of teeth with irreversible pulpitis.

Methodology:

- Sixty patients with the diagnosis of irreversible pulpitis in one mandibular tooth were selected. Two other teeth in the same quadrant were selected as controls. An electric pulp tester was used to evaluate pulp sensitivity at the baseline, after drug administration, and IAN injection (1.8 ml lidocaine with 1:100,000 epinephrine), which was done one hour afterwards.

Results:

- Significantly lower tooth sensitivity levels were observed in patients who were given acetaminophen-codeine or ibuprofen pre-operatively. This reduction in sensitivity was more significant in the ibuprofen group.

Conclusion:

- This study seems to confirm our empirical finding that pre-operative administration of 400-600 mg ibuprofen (if not contraindicated), one hour before local anesthetic injection is an effective adjunct for achieving deep pulpal anesthesia in mandibular teeth with irreversible pulpitis.