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ABSTRACT OF THE SCIENTIFIC LITERATURE



THE SIGNIFICANCE OF NEEDLE DEFLECTION IN SUCCESS OF THE INFERIOR ALVEOLAR NERVE BLOCK IN PATIENTS WITH IRREVERSIBLE PULPITIS

The purpose of this prospective, randomized, blind study was to compare the efficacy of 2 inferior alveolar injection techniques (conventional technique vs the wand) in adult patients diagnosed with irreversible pulpitis. Sixty-four emergency patients participated in the study and randomly received 2.8 ml of 2% lidocaine with 1:100,000 epinephrine, using either one of the injection techniques. An additional long-buccal anesthesia was provided using the standard syringe technique. Only one operator administered the local anesthetic. Seventeen minutes following injection and after verification of lip numbness as a sign for profound anesthesia, a rubber dam was placed and endodontic access began. Patients assessed pain using a visual analogue scale at 3 different stages: (1) within dentin; (2) entering the pulp chamber; or (3) initial file placement. The success rate was 50% for the conventional technique and 56% for the wand technique, with no statistically significant differences between the 2 groups. These results agree with other studies conducted on irreversible pulpitis patients.

Comments: Clinicians must realize that lip numbness does not guarantee successful pulpal anesthesia, and other supplemental techniques such as intraosseous or periodontal ligament are necessary to achieve pulpal anesthesia. It was also important to see that, as with pediatric patients, the use of the wand in adults was not more effective than the traditional syringe technique. **MG**

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Kennedy S, Reader A, Nusstein J, Beck M, Weaver J. The significance of needle deflection in success of the inferior alveolar nerve block in patients with irreversible pulpitis. *J Endod*. 2003;29:630-633.

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