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Title: The Wand Versus Traditional Injection for Mandibular Nerve Block in Children and Adolescents: Perceived Pain and Time of Onset

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Abstract:

Purpose: The purpose of this study was to compare the perception of pain and time of onset in relation to mandibular alveolar nerve block administered by a computerized anesthesia delivery system (ie, The Wand) and a traditional anesthesia system (ie, the syringe).

Methods: This study was conducted according to a split-mouth design, with both types of injections being given to all patients. Subjects consisted of 33 patients between 7 and 18 years of age requiring local anesthesia for dental restorations in both sides of the mandible. All patients were blindfolded, and the sound from the Wand machine was activated during both types of administration. Topical analgesic was placed in the area of the injection site in all cases. Pain ratings were obtained using a 10-point visual analog scale (VAS). Time of onset was measured, from withdrawal of the needle to numbness of the lower lip was reported.

Results: The computerized anesthesia delivery system resulted in significantly lower pain ratings than the traditional syringe. No difference could be found in time of onset between the 2 methods.

Conclusions: Mandibular alveolar block analgesia seems to be less painful when using The Wand than when using a traditional syringe.