The comparison of Periodontal Ligament Injection and Alveolar Nerve Block in the Treatment of Mandibular Primary Molars

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Abstract

Statement of problem: Inferior alveolar nerve block is a common technique for anesthetizing of the primary mandibular molars. A number of disadvantages has been associated with this technique, longtime anesthesia might make the child to bite his/her tongue and lip. Periodontal ligament injection could be considered as an alternative method for inferior alveolar nerve block.

Purpose: The purpose of this study was to determine the effectiveness of periodontal ligament injection compared with mandibular block in treating mandibular primary molars.

Materials and method: Design of this study was sequential double blind randomized trial. The study population consisted of 82 cooperative children aged 3-9 years old, requiring the same type of treatment on contralateral mandibular molars. Bilateral identical dental procedures were performed on each patient during the same appointment. Signs of discomfort included body and eye movement indicating pain, verbal complaint, and crying (SEM scale), were evaluated blindly by a dental assistant who was not aware of the two groups. The data were analyzed by T- test.

Results: Success rate was 91/46 and 92/68 in periodontal ligament injection and mandibular block technique respectively. No statistically significant difference was found between the two anesthetic techniques.

Conclusion: Results showed that periodontal ligament injection can be used instead of inferior alveolar nerve block in treating mandibular primary molars

Key words: Inferior alveolar nerve block, Periodontal injection, Primary molar

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