

Assessment of the AMSA injection using a computerized device in children

ABSTRACT NO.

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OBJECTIVE: To evaluate the anesthetic effectiveness of the Anterior Middle Superior Alveolar (AMSA) injection administered through a computer-controlled local anesthetic delivery system (CCLAD) and compare with the traditional buccal and palatal injections used to anaesthetize maxillary primary molars.

MATERIALS and METHODS: The sample included 80 primary maxillary molars. The group was divided into eight subgroups, each comprised of ten teeth. The effectiveness of the technique was measured and compared in 1st and 2nd primary molars for pulpotomy or extraction treatments through the sounds, eyes and motor scale (SEM), where the evaluator was blinded from the anesthetic technique. Statistical analysis was carried out using SPSS version 10.0.

RESULTS: The AMSA injection with the CCLAD was found to be effective in anesthetizing maxillary primary molars in pulpotomy and extraction procedures. There was no significant difference between the two anesthetic techniques except in the step of gingival retraction buccally in which the traditional injections were more effective than the CCLAD during extractions. No significant difference was found between both primary molars in the anesthetic effectiveness of both techniques.

CONCLUSION: The AMSA injection using CCLAD was found to be effective in children. However, further research in this field is necessary.