

Clinical Analysis of Regenerative Endodontic Procedures: Multiple or Single-Visit?

AIM

Previous literature are still insufficient to reach a conclusion regarding the accomplishment of pulp regeneration procedures in single-visit. This study compared the clinical and radiographic outcomes of regenerative endodontic procedures protocols performed with interappointment dressing or single-visit in traumatized immature teeth with pulp necrosis.

MATERIAL & METHODS

Patients aged 7-14 years presenting traumatized immature teeth with pulp necrosis were evaluated. Then, 20 maxillary incisors presenting previously stablished criteria were selected and randomly assigned to 2 groups: inter-appointment dressing (CHP) (n=11) or single-visit (SV) (n=9).

Pulp regeneration procedures were accomplished in 3 main steps: passive decontamination; blood clot stimulation; and cervical sealing. In CHP group, an inter-appointment dressing of calcium hydroxide associated with 2% chlorhexidine gel was kept into the intrarradicular space for 21 days. In SV group, an immediate stimulation of blood clot was accomplished.



Clinical and radiographic findings were assessed every 3 months during 1 year. Root development (apical closure, increase of root length and/or thickness) were quantified using the Image J software. All radiographic analyzes were performed by 2 previously calibrated evaluators. Results were compared using t-test, Wilcoxon test, and Mann-Whitney test for comparison between groups. For qualitative data, G-test and Fisher's exact test were applied. For ordinal qualitative data, Mann-Whitney test was used. The significance level was stablished in 5%.

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RESULTS

Demographics and dental trauma characteristics of the study population was similar between groups (p>0.05). No treatment failure was observed (0%). Clinical and radiographic preoperative and postoperative characteristics observed in the study population of both groups was similar (p>0.05). No statistical differences were observed in radiographic outcomes of groups (p>0.05).

CONCLUSIONS

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Regeneration Research POSTER PRESENTATION <u>Category</u>: Human Health (Biomedical Science)

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