Traumatized Immature Teeth Treated with 2 Protocols of Pulp Revascularization

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**Aim**
- To compare triple antibiotic paste and CHP (Ca(OH)2 + 2% CHX gel) as intra-canal medications for pulp revascularization in traumatized teeth.

**Materials & Methods**
- 23 immature, non-vital anterior teeth with hx. of trauma were used in this study.
  - **1st visit**
    1) Access cavity
    2) Irrigation with 20 mL 6% NaOCl
    3) Irrigation with 5 mL 5% sodium thiosulfate for 1 min to inactivate NaOCl
    4) Irrigation with 10 mL physiological solution and 10 mL 2% CHX
    5) Irrigation with 5% Tween 80 & 0.07% soy lecithin to reduce the carryover effect of CHX
  - The apical third received no treatment to preserve stem cells that might be present.
  - Teeth were then randomly treated with one of the following pasts for 21 days
    - **Group 1:** Triple antibiotic paste (TAP) (12 teeth)
    - **Group 2:** Ca(OH)2 paste + 2% CHX gel (1:1 ratio) (11 teeth)
  - **2nd visit**
    1) Irrigation with saline solution to remove intra-canal medication
    2) Final irrigation with 3 mL 17% EDTA for 3min followed by saline solution
    3) A hand file was used to induce bleeding and teeth were left till blood clot was formed
    4) CollaCote placed on the blood clot and then a 3-mm of white MTA was placed + coronal seal
  - Patients were recalled at 1, 3, 6, 9, 12, 15, and 19 months.
  - Clinical & radiographic findings were recorded and compared to initial findings
  - Statistical analysis were used to analyze the clinical & radiographic parameters before and after pulp revascularization and to evaluated the difference between the TAP and the CHP groups

**Results**
- In both groups, there was a reduction in signs & symptoms after revascularization therapy.
- In both groups, no teeth recovered pulp sensitivity but apical closure was significantly observed.
- Thickening of lateral dentinal walls was observed in 5 teeth in each group.
- Increase in root length was observed in 41.7% of the TAP group and in 27.3% of the CHP group.
- Crown discoloration was observed in 83.3% of the TAP group and in 27.3% of the CHP group.

**Conclusion**
- Both revascularization protocols were equally effective when treating traumatized teeth.
- TAP causes tooth discoloration which can be considered a disadvantage when compared to CHP.

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