

## Ferric sulphate and formocresol in pulpotomy of primary molars: long term follow-up study.

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### Abstract

**AIM:** The objective of this study was to compare the effects of ferric sulphate (FS) to that of the full strength of formocresol (Buckley's formula) (FC) as pulpotomy agents in primary human molar teeth 42-48 months after treatment. This was to assess the succeeding premolar teeth for decalcification, abnormal morphology or any other defect.

**METHODS:** Seventy children, ranging in age from 3 to 6 years, mean 4.3 years, were treated for pulpotomy of primary molars. Ferric sulphate 15.5% solution (applied for 15 seconds for 84 teeth) and formocresol solution (5 minutes procedure for next the 80 teeth) were used as pulpotomy agents. In both groups, pulp stumps were covered with zinc oxide eugenol paste. Permanent restorations were, in most cases, stainless steel crowns and in some of them amalgams. Follow-up clinical assessments were every 3 months and the radiographic follow-up time was 6, 20 and 42-48 months after treatment.

**STATISTICS:** The differences were statistically analyzed using the Chi square test.

**RESULTS:** These revealed 96.4% clinical success rate in the FS and 97.5% in the FC groups. Radiographic success rate in the FS group was 92.0%, while 94.6% in the FC group. No statistical significant differences were found between the radiographic assessment of the two pulpotomy agents.

**CONCLUSION:** Ferric sulphate showed similar clinical and radiographic success rate as a pulpotomy agent for primary molar teeth after long term evaluation period, compared with formocresol. Ferric sulphate, because of its lower toxicity, may become a replacement for formocresol in primary molar teeth.