

## CLINICAL AND RADIOGRAPHIC EVALUATION OF CALCIUM HYDROXIDE IODOFORM PASTE AND FORMOCRESOL PULPOTOMY TECHNIQUES IN PRIMARY TEETH

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### ABSTRACT

**Purpose:** The purpose of this study was to clinically and radiographically evaluate calcium hydroxide iodoform paste (Vitapex) and formocresol pulpotomy techniques in human primary teeth requiring vital pulp therapy.

**Materials and Methods:** Calcium hydroxide iodoform paste and formocresol pulpotomies were completed on 40 primary molars in 20 children, aged 4 to 8 years, with a mean age of 6.1 years. Each child had one molar treated by calcium hydroxide iodoform paste pulpotomy and another molar by formocresol pulpotomy. All teeth were followed up clinically and radiographically after 1, 3, 6 and 12 months.

**Results:** The clinical and radiographic success rates for the calcium hydroxide iodoform paste group were 90% and 70%, respectively and for the formocresol group were 95% and 90% respectively. There was no statistically significant difference between the 2 groups, either clinically or radiographically.

**Conclusions:** Calcium hydroxide iodoform paste did not show better clinical or radiographic findings as a primary tooth pulpotomy agent compared with formocresol.

**KEYWORDS** Calcium hydroxide iodoform paste, formocresol, pulpotomy

### INTRODUCTION

Pulpotomy is one of the most frequently used treatments for retaining cariously involved primary molars that would be otherwise extracted<sup>(1,2)</sup>.

Formocresol has been a popular pulpotomy

medicament for many years<sup>(3,4)</sup>. Concerns have been expressed about formocresol pulpotomy because of observed pulpal responses with inflammation and necrosis<sup>(5)</sup>, cytotoxicity<sup>(6)</sup>, systemic disturbances<sup>(7)</sup>, mutagenic and carcinogenic potential<sup>(8)</sup> and immunologic responses<sup>(9)</sup>. Different alternatives

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