**Original Research Paper** 

**Dental Science** 



PULPOTOMY IN EMERGENCY: ANALGESIA OF DIFFERENT SEDATIVE FILLINGS

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ABSTRACT

Patient with severe toothace may come at any time of day without prior appointment; the dentist may find it difficult to accommodate a lengthy procedure for patient's toothache in his scheduled. Hence a dentist may opt for a short procedure like pulpotomy. In pulpotomy, placement of various medicaments is used for pain relief. The study compared the analgesic action of various sedative medicaments after pulpotomy procedures. 146 patients with severe toothache were treated with pulpotomy procedure with different sedative fillings and analgesic effect of various sedative fillings was seen. It was found that no sedative material worked as pain relief for toothache. Thus, it is the proper disinfection of pulp chamber that plays the major role in toothache relief.

# **KEYWORDS**:

## **INTRODUCTION-**

A root canal treatment is definite treatment of irreversible pulpal inflammation.1 But pulpectomy is time consuming complex and high cost procedure2 less time consuming pain relieving procedures are needed because severe toothache most of time are unscheduled. Pulpotomy, including antibacterial and soothing medicaments over the radicular pulp has been applied in emergency state.3, 4 Eugenol8, cresatin9, 10 and camphorated phenol11 are the usually used dressings for these purpose.

The aim of the study is to evaluate the analgesic effect of sedative dressing's pulpotomy.

Materials and methods- 146 patients who required an emergency procedure because of toothache from pulpal disease were included in the study. All teeth were vital and had spontaneous pain or lingering pain after contact with hot or cold foods and beverages. The teeth were anesthetized [xylocain 2% with epinephrine 1:200000]. Caries of adjacent wall were excavated with round bur mounted on high speed hand piece and caries near to axial and pulpal wall removed by slow speed handpiece. After the deroofing of pulp chamber, the coronal pulp removed by hand instrument spoon excavator and slow speed hand piece to the level of the canal orifice. Chamber was cleaned with 5ml saline and NaOCl 2.5%. Bleeding were controlled by cotton pellet dipped with hypo 2.5% for 5 min.

When the bleeding had stopped, a cotton pellet moistened with eugenol, cresatin and camphorated phenol ZOE saline and dry pellet was placed on the remaining pulp tissues. The type of treatment choosen randomly. The distribution of teeth and treatment methods used are shown in table 1.

teeth	Camphorat ed phenol	eugenol	cresatin	ZOE	saline	Dry pellet
incisors	8	4	4	0	4	4
premolares	8	4	4	6	4	4
molars	12	16	16	20	18	20
total	28	24	24	26	26	28

After completion of treatment each patient received 3 questionnaires in which postoperative symptoms were to be recorded.

The first questionnaire was filled in when anesthetic effect had disappeared. The second guestionnaire was completed 1 day and the third 7 days after the emergency treatment. The patients were asked to check on the questionnaire whether the tooth was tender given a recall appointment 30 days after the emergency treatment

at this appointment symptoms were recorded again and pulpectomy was performed.

#### **Results-**

When the anesthetic effect was gone 32 patients still reported pain [table 2]

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Days after Treatment	No of patients	pain	Discomfort	No symptoms
0	146	32	66	48
1	140	0	16	124
7	140	0	10	130
30	136	0	2	134

6 of these patients immediately returned for treatment. These patients were excluded from the continued study. 66 patients reported tenderness, whereas 48 reported no symptoms at all. One day after emergency treatment none of the patients had any pain. 16 patients reported tenderness. Of the 136 patients who returned on the 30 only 2 reported tenderness. Data from six groups of patients subjected to the different ways of treatment are shown in fig 1. There were no significant differences among 6 groups.

Fig 1 recorded symptoms related to the various dressings used pain ---discomfort [] no pain . two stars. Patients needed further emergency treatment one star patient did not show up at 30 days clinical examination.



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The various sedative fillings had no effect on the pain relief5,6,7,8.In study it was found that cleaning of the pulp chamber and placement of a interim restoration to avoid re-infection was the major cause of pain relief where as no contribution was obtained by the use of different intracanal medicaments.

In conclusion, the important parts of emergency treatment of acute pulpitis are the removal of etiological factors e.g. caries10,, the removal of the inflamed part of the pulp tissue11 and the placement of a interim restoration to avoid re-infection12. The use of different soothing fillings seems to have no pain relieving effect.

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