"GROSSLY CARIOUS PULP EXPOSED VITAL TOOTH", IS IT AN INDICATION FOR ROOT CANAL THERAPY?

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Root canal therapy involves skilled labour, and it is time consuming and expensive. The time factor can lead the tooth to get dehydrated and vulnerable for fractures. If the vitality can be maintained, the tooth can be restored without going for more expensive treatment such as root canal fillings and cast metal restorations. Some authors have reported that the period of exposure and size of the exposure had no bearing on success or failure on direct pulp- capping (Heide and Kerekes – 1986). Further more in clinical practice it has been noticed that some vital teeth remain with large carious pulp exposures for an unknown period of time.

Grossly carious vital teeth, having pulp exposures larger than 2mm diameter, for an unknown period of time, were selected for this study. After removal of undermined enamel with high-speed fissure bur, soft dentine was removed with slow speed large round bur. Finally, carious dentine was removed with sharp spoon excavator without local anesthesia. After arresting bleeding with Chlohexidine rinse, direct pulp capping was performed with quick setting calcium hydroxide and tooth was restored with ZnO/E or GIC. Patient was advised to visit the clinic if there were any signs and symptoms or dislodged temporary filling. Patients were reviewed every six months. Permanent restorations were placed after one year.

This is an on-going study. 76 cases have been treated. Only 24 cases returned with acute signs of pulpitis. Several other factors were also considered that might have an influence on the success or failure rates, such as types of restoration and pre-operative signs and symptoms, etc.

In conclusion it may be stressed that, even teeth with large exposures on roof of the pulp chamber could be saved with direct pulp capping, without performing root canal therapy. Furthermore direct pulp capping can be done for even large carious pulp exposures in selected cases.