Title: Comparing CEM Cement and MTA in Direct Pulp Capping (DPC) treatment in deep caries lesions as liners

Abstract: Abstract: in deep caries lesions we can help the pulp to save its life by removing caries from the tooth and doing Direct Pulp Capping (DPC). The Aim of this poster is comparing two Biocompatible materials named CEM Cement and MTA in Direct Pulp Capping (DPC) treatment.

Methods and Materials: The articles that related to pulp capping treatment (Direct & Indirect) from 2006 to 2012 was evaluated in this study and assessment.

Results: Findings Suggest that Antimicrobial properties of the CEM Cement is better than MTA. These two materials don’t have any significant difference for seal ability but both of them are better than IRM. Both of them have similar working time and they are same in dimensional change. Setting time and flow ability of CEM Cement is more than MTA. Also CEM Cement has less Film Thickness in comparison with MTA. The level of Cytotoxicity of MTA and CEM Cement are the same but both of them are significantly better than IRM. Also the color change of MTA is more than from CEM Cement. The speed of Dentinal Wall formation is similar to CEM Cement and MTA but is faster than Calcium Hydroxide. And both of two materials show better structural integrity in Dentinal Wall. Also CEM Cement can create Hydroxyapatite crystal that similar to the standard sample of it whereas MTA doesn’t have this advantage.

Key Words: Deep caries lesions, Direct Pulp Capping, CEM Cement, MTA

Presentation: Poster