



## ▼ POST GRADUATES ABSTRACTS

### PG - 67 : EVALUATION OF NON-CARIOUS CERVICAL LESIONS RESTORED WITH RESIN-MODIFIED GLASS IONOMER AND GLASS CARBOMER: A SINGLE-BLIND RANDOMIZED CONTROLLED CLINICAL TRIAL

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**Introduction:** Glass Carbomer is a new generation of restorative material developed from Glass Ionomer Cements with possibility of gradual mineralization into fluorapatite. The aim of this clinical trial was to compare and evaluate the clinical performance of Glass Carbomer cement over a period of one year, with that of Resin-Modified Glass Ionomer Cement in Non-Carious Cervical Lesions.

**Methodology:** Thirty – three subjects (30-60 years) with NCCLs of not more than 2mm depth in premolars were recruited. Fifty- six NCCLs were restored with RMGIC (Group 1) and another 56 NCCLs with Glass Carbomer (Group 2). Single blind evaluation of clinical parameters was performed at the 3<sup>rd</sup>, 6<sup>th</sup> and 12<sup>th</sup> month using modified USPHS criteria. The intragroup comparison at various intervals was evaluated using the McNemar test and the intergroup comparison using the Fishers Exact tests.

**Results:** Recall rate was 73.2% for one year. Group 1 had 94.6% retention rate whereas Group 2 had 86.5%. There was statistically significant decline after 12 months for marginal integrity ( $p=0.008$ ), anatomic form (0.002) and colour match ( $p=0.0003$ ) for Group 2. Group 1 restorations showed statistically significant better results in terms of retention, marginal integrity ( $p=0.005$ ), colour match ( $p< 0.0001$ ), wear ( $p =0.0311$ ), recurrent caries ( $p =0.0228$ ), marginal staining ( $p =0.0086$ ), fracture ( $p =0.0054$ ) and post-operative sensitivity ( $p =0.0574$ ) after one year of clinical service.

**Conclusion:** Clinically, RMGIC (Group 1) showed an overall better performance than Glass Carbomer (Group 2).