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OTTIP CHANKANKA : EFFECTIVENESS OF FLOWABLE COMPOSITE RESIN IN PREVENTIVE RESIN RESTORATIONS. THESIS ADVISORS : ARAYA PHONGHANYUDA, DIP.AMERICAN BOARD OF PEDIATRIC DENTISTRY, CHOLTACHA HANIRATTISAI, Ph.D. 54 p. ISBN 974-662-580-2

The purpose of this study was to evaluate the clinical performance and wear resistance of two groups of materials in preventive resin restorations. Fifty pairs of minimal pit and fissure caries in first permanent maxillary or mandibular molars were restored. One side used flowable composite resin (Tetric Flow). The other side used posterior composite resin (Z100) and sealant (Concise White Sealant). The clinical study was evaluated by Winkler et al criteria. The results of 6-month and 12-month recalls were statistically analysed using Wilcoxon sign-rank test at $p < 0.05$. There was no statistically significant difference between flowable composite and conventional PRR groups. The replicas were made from the polyvinylsiloxane impressions of teeth immediately after restoration, and at 6-month and 12-month recalls. Only Alfa score replicas were used to assess the wear of materials by profilometer (modified surface roughness tester). The profiles were superimposed and the maximum difference wear depth was measured. This wear study was statistically analysed using pair-t test at $p < 0.05$. There was no statistically significant difference between the flowable composite and conventional PRR groups.