Long-term performance of refurbished amalgam restorations: 10-year follow-up

Moncada, Gustavo
Fernandez, Eduardo
Mena, Katherine
Vildosola, Patricio
Estay, Juan
de Oliveira, Osmir B.
Martin, Javier
Mjör, Ivar A.
Gordan, Valeria V.

© 2017 Quintessenz. Purpose: This prospective, blinded clinical trial assessed the performance of amalgam restorations that were refurbished, replaced, or not treated. Materials and Methods: Twenty-three patients were included, ages 18-80 years, with 63 amalgam restorations that had one or more defects in their clinical features, such as defective anatomic form, roughness and/or luster according to United State Public Health Service (USPHS) criteria. Restorations were randomly assigned to either refurbishment (A: n = 21), replacement (B: n = 21) or untreated (C: n = 21) groups. Two calibrated examiners evaluated the restorations at baseline (Kappa = 0.74) and after 10 years (Kappa = 0.84), according to eight parameters: anatomy, roughness, luster, secondary caries, marginal adaptation, occlusal contact, marginal staining and tooth sensitivity. Wilcoxon tests were performed for within-group comparisons, and Friedman tests were used for multiple within-group comparisons. The Mantel-Cox t