

Restoration loss in primary molars: re-restoration or not?

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Abstract:

AIM: The purpose of this study was to find an answer as to what to do with Atraumatic Restorations (ART) failures: re-restore or leave the preparation further unfilled? **STUDY DESIGN:** Cross sectional study. **METHODS:** In 2006, 804 children in Kenya each had one proximal cavity treated using the ART approach. Out of the original group of 192 children, who had lost their restorations but still had the treated molars in situ, were selected for further study in 2008. The length of time that the restorations had been in situ was known while the colour, hardness and the extent of infected dentine was then evaluated and documented. **STATISTICS:** Analysis of the data obtained was conducted using SPSS 16.0. Chi Square tests were performed with the variables of hardness, colour and infected dentine, and a 5% confidence interval was used. The Spearman's Rank Correlation Coefficient was also calculated. **RESULTS:** The results showed that 66% of the molars that had lost restorations had hard dentine, 78% of the preparations showed dark dentine and 50.7% appeared to have no infected dentine. These percentages increased with the increase in the survival time of the restorations. **CONCLUSIONS:** It is not always necessary to re-restore primary molars after ART restoration loss. Further research is necessary to confirm these findings.