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Bioactivity and properties of an adhesive system functionalized with an experimental niobium-based glass

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Abstract

Objective: This study evaluated the incorporation of niobophosphate bioactive glass (NbG) fillers into a commercial adhesive resin. **Materials and Methods:** The silanized (NbGs) or non-silanized (NbG) NbG was added to the commercial adhesive system One Step (OS) at 30% by weight; unfilled adhesive served as control. The bioactivity of adhesives was analyzed by SEM and FTIR/ATR after 28 days in PBS. The adhesives were evaluated as regards microtensile bond strength immediately and after six months (n=6); degree of conversion (n=3), microhardness (n=5); and radiopacity (n=3). Data from each test were submitted to

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