

## **Influence of Preheating Self-Adhesive Cements on the Degree of Conversion, Cell Migration and Cell Viability in NIH/3T3**

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**Abstract :** To evaluate the influence of preheating self-adhesive cement at 39°C on cell migration, cytotoxicity and degree of conversion. RelyX U200, Set PP and MaxCem Elite were subjected to a degree of conversion analysis (FTIR-ATR). For the cytotoxicity analysis, extracts (24 h and 7 days) were placed in contact with NIH/3T3 cells. For cell migration, images were captured of each sample until the possible closure of the cleft occurred. In the results of the degree of conversion, preheating did not improve the conversion of cement. For the MTT, preheating did not improve the results within 24 hours. However, it generated positive results within 7 days for the Set PP resin cement. For cell migration, high rates of cell death were found in all groups. It is concluded that preheating at 39°C caused a positive effect only in increasing the cell viability of the Set PP resin cement and that both materials analyzed are highly cytotoxic.

**Keywords :** dental cements, resin cements, degree of conversion, cytotoxicity, cell migration assays

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