Comparison of Microleakage of Concise Fissure Sealant after Curing by Different Methods: In vitro study

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Abstract

Background and Aim: Ability of sealants in prevention of micro leakage is important. The role of sealant polymerization for this is essential .It is suggested that stress caused by polymerization may deceased by soft-start technique. The aim of this study is to evaluate the effect of full-power, low power and soft start technique on micro leakage of concise fissure sealant.

Materials and Methods: In this experimental in vitro study, 45 human premolars divided in to 3 groups each containing15 teeth .All teeth after etching, sealed by concise fissure sealant .group 1 cured by full power method, group 2 by low power method and group 3 by soft start method .After immersion in basic fouchin solution, teeth were sectioned and assessed by stereo micro scope .the data were analyzed by Kruskal Wallis test.

Result:%6/7 of specimens had no micro leakage in full power group. Micro leakage occurred in all of specimens of low power group.in soft start group %13/3 of specimens had no leakage.

Conclusion: There were no different in micro leakage of fissure sealant cured by each of curing methods.

Keywords: Dental, Light curing, Fissure Sealants, P.T, Leakage

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