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Title: Comparison of color stability of dimethacrylate and silorane-based composite after staining and bleaching
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Abstract: Introduction:
Silorane based composite has been introduced recently which are low shrink and contain two bifunction molecule; oxirane and silixon. As the resin matrix component may affect the color property this composite could have different color property. The aim of this study was to compare the color stability of dimethacrylate and silorane-based composite after staining and bleaching.

Material and Method:
Thirty disks with a diameter of 20mm and 2mm of thickness were fabricated for testing using three different composite (Filtek Z250, Filtek Z350, Filtek P90). Standardized L*a*b* parameters were determined and the specimens were subjected to staining with tea solution for one week. Color parameter determined again and then the specimens bleached using 15% carbamide peroxide for 8 hours a day for two weeks. Color change (∆E) in the composite disks was calculated. The data were analyzed using multiple measurement and Tukey tests.

Results
There were significant differences between groups regarding the color change after staining and bleaching. The least color change was observed in Z250 composite and the most one was in P90 composite. (P<0.05)

Conclusion
Silorane based composites has less color stability than dimethacrylate composites.

Key words: Composite resin- silorane- color

Presentation: Oral