

## Comparing shade changes of ceramic restorations using different translucent resin cements

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### Abstract

**Aim:** The aim of the present study was to evaluate the shade change of three manufacturers of translucent resin cements on the final color of ceramic veneers.

**Materials & Methods:** Thirty (30) disk-shaped ceramic specimens (IPS e. max, 0.6 mm x 7.00 mm diameter) and 30 composite resin background specimen blocks were fabricated (3 mmx10 mm diameter). They were then divided into three groups, each group containing 10 ceramic disks and 10 composite disks. The ceramic disks were cemented on the composite resin background blocks using translucent cement from three different manufacturers. (Group 1 - Variolink Esthetic LC Neutral by Ivoclar Vivadent, Liechtenstein; Group 2 - eCEMENT Translucent by Bisco, USA; Group 3 - RelyX Veneer Cement Translucent by 3M ESPE, USA). A spectrophotometer (VITA EasyShade Advance) was used to measure the color parameters before and after cementation. The color differences were then statistically analyzed using oneway ANOVA. Significance was set to  $P < 0.05$ .

**Results:** The final shade of the ceramic veneers showed the most significant changes in  $\Delta E$  value for the translucent shade from eCEMENT by Bisco while Variolink and Relyx showed a less significant color change. However, all three translucent cements exceeded the clinically acceptable threshold of  $\Delta E > 3.3$ .

**Conclusions:** The three brands of translucent resin cement produced clinically noticeable shade change on the ceramic veneer with Variolink Esthetic cement (Group 1) having the least effect on the color of the ceramic and eCEMENT (Group 2) producing the most color change.

### Biography:

Hayder Maytham Abdulmahdi Allawi is a General Practitioner Dentist with a mission to solve dental problems by creative thinking and finding new innovative solutions. He is a Founder of Bondistry - #LifeChangingMoments, where he has published more than hundred articles and posts to raise the dental health awareness among people. He was nominated as the 2017 Ambassador for the United Arab Emirates Universum Career to guide young graduates of different colleges to their perfect employers. He has received an Exhibitioner Certificate from Ajman University for exhibiting at the Demo Day event for Innovation and Entrepreneurship. He was recognized as a unique dental student by Ajman University and received an Honor Certificate for Outstanding Academic Achievement.