

# Color regression and maintenance effect of intracoronal whitening on the quality of life: RCT? A one-year follow-up study

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**Objective:** This randomized clinical study evaluated two parameters: 1) the clinical color rebound of whitening patients' tooth discoloration using the walking bleaching technique and 2) the impact on psychological and aesthetic self-perception at the one-year follow-up of patients who underwent bleaching of nonvital teeth. **Methods and Materials:** Fifty study participants with nonvital tooth discoloration were recruited. Teeth were assigned randomly into one of two groups: 1) 35% hydrogen peroxide (n=25) and 2) 37% carbamide peroxide (n=25). Intracoronal bleaching was carried out over the course of four sessions using the walking bleach technique. Tooth color was evaluated after each session in order to measure the total color variation (DE). The guide was arranged from highest (B1) to lowest values (C4) for evaluating color, and color changes using Vita Classical Shade (DSGUs) units were calculated. Subjective and objective assessments were compared with the counterpart of the tooth. Aesthetic perception and psychosocial factors were evaluated before and after treatment by the Oral Health Impact Profile (OHIP) and Psychological Impact of Dental Impact Questionnaire (PIDAQ) surveys. **Results:** Color changes (DE) were 15.48 ± 5.17 and 14.02 ± 4.85 for carbamide and hydrogen peroxide groups, respectively. There were no significant differences (p>0.05) between these two groups at the one-year follow-up. There was a decrease in the PIDAQ scores after treatment compared to baseline values (p<0.05). The majority of OHIP values regressed to baseline values. **Conclusion:** The technique of walking bleaching was highly effective and showed minimal color rebound in nonvital teeth and had a positive effect on

patients? psychological impact at the one-year follow-up. © Operative Dentistry, 2019.