

# Quality of life and stability of tooth color change at three months after dental bleaching

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**Purpose:** Intracoronary bleaching is a minimally invasive, alternative treatment that addresses aesthetic concerns related to non-vital teeth discoloration. However, to the best of our knowledge, no studies have assessed the psychosocial impacts of such procedures on patients' aesthetic perceptions. The aim of this study was to evaluate aesthetic perceptions and the psychosocial impact of patients up to 3 months after their teeth had been bleached with hydrogen peroxide (35%) and carbamide peroxide (37%) using the walking bleach technique. **Methods:** The patients were randomly divided into two groups according to the bleaching agent used: G1 = hydrogen peroxide 35% (n = 25) and G2 = carbamide peroxide 37% (n = 25). Non-vital bleaching was performed in four sessions. Color was objectively ( $\Delta E$ ) and subjectively ( $\Delta$ SGU) evaluated. Aesthetic perception and psychosocial factors were evaluated before, 1 week and 1 month after the bleaching using the Oral Health Impact Profile (OHIP) and Psychosocial Impact of Dental Aesthetics Questionnaire (PIDAQ) questionnaires. **Results:** The color change ( $\Delta E$ ) values at 1 month were G1 =  $16.80 \pm 6.07$  and G2 =  $14.09 \pm 4.83$ . These values remained stable until the third month after treatment ( $p > 0.05$ ). There

was a decrease in the values of OHIP-aesthetics and PIDAQ after treatment versus baseline ( $p < 0.05$ ). This status was maintained through the third month after treatment. Conclusions: Both agents were highly effective and had a positive impact on the aesthetic perception and psychosocial impact of patients, values that also remained stable over time. Non-vital bleaching yields positive and stable impacts on aesthetic perception and psychosocial factors. ClinicalTrials.gov identifier NCT02718183. © 2018, Springer Nature Switzerland AG.

Aesthetic auto-perception

Dark tooth bleaching

Psychosocial impact

Randomized clinical trial

hydrogen peroxide

peroxide

urea

tooth bleaching agent

adult

Article

clinical article

controlled study

dental education

dental procedure

double blind procedure

female

human

male

Oral Health Impact Profile

practice guideline

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Psychosocial Impact of Dental Aesthetics questionnaire

quality of life

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tooth color

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