

Clinical Evaluation for Tooth Whitening of a Bioglass[®] (NovaMin) Containing Dentifrice.



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INTRODUCTION: Various treatment modalities have been used to whiten teeth including in-office bleaching, night guard bleaching and whitening toothpastes. A dentifrice used on a regular basis can be effective for both initial whitening and maintenance of the lighter shade. The purpose of this study was to evaluate the whitening efficacy of a fluoride dentifrice containing a 7.5% concentration of a Bioactive Glass (NovaMin[®]) compound replacing the abrasive silica.

METHODS: Ten healthy adult volunteers were screened for acceptance into this 4-week clinical trial. At baseline, the shade measurement was taken from the middle third to the incisal edge with a Vita shade guide arranged in the following order: B1, A1, B2, D2, A2, C1, C2, D4, A3, D3, B3, A3.5, B4, C3, A4, C4 (Lumin Vacuum-Farbskala, Vita). Only patients with a shade no lighter than A3 were qualified for this study. Condition of hard tissue and soft tissue were noted for each subject prior to and at each study appointment. Patients were instructed to use only NovaMin 7.5% dentifrice two times daily, maintain 2 minutes brushing time and to abstain from other oral care products. All subjects were recalled at two and four weeks.

RESULTS: At two weeks the mean shade tabs change was 4.2 with a range from 0 to 9. At four weeks the mean shade tabs change was 5.8 with a range from 0 to 9. No deleterious effects on the hard tissue and soft tissue were noted. Statistical analysis demonstrated that a significant difference between both two weeks and four weeks and baseline ($p < 0.05$), ANOVA.

In conclusion, NovaMin 7.5% dentifrice was shown to whiten the teeth with a mean shade change of 5.8 with no adverse effect.

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