**Title:** Evaluation of teeth bleaching with application of Ozone containing dentifrice

**Abstract:**

**Background & Aim**

The objective of this study was to evaluate teeth whitening with application ozone as a whitening material in a new experimental toothpaste.

**Materials and Methods**

In this laboratory study, 48 healthy human molar teeth were used. After teeth disinfection and staining, the colors were determined to be placed in suitable experimental groups by the colorimetry method and visual inspection(n=12). Four groups were formed based on type of toothpaste material. The first group: toothpaste with ozone material; the second group: toothpaste without ozone; third group: toothpaste with whitening material (Aquafresh); and the fourth group: toothpaste without whitening material (Nasim). The tooth brushing regime equal to six weeks was done as well. Then color change was determined immediately and one month after brushing with the experimental toothpaste by the colorimetry method and visual inspection. The analysis of variance (ANOVA) and the Tukey tests were used for evaluating statistical data (α=0.05).

**Results**

Lab system color values showed increased teeth whitening by the use of toothpaste with ozone and Aquafresh. In the colorimetry method the amount of ΔE was not significant at different stages (P>0.05). With the visual method there was a significant difference between the mean color change of the four examined toothpaste types (P<0.05), in which this significant difference was observed between color-change ranking of groups one and three.

**Conclusion**

New toothpaste containing ozone material caused significant changes in whitening darkened teeth from a clinical point of view by the visual evaluation.

**Keywords:** Ozone, Toothpaste, Whitening