GREEN TEA AS A TREATMENT MODALITY FOR DENTINAL EROSION

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ABSTRACT

OBJECTIVE

The aim of this in vitro study was to analyze the effect of green tea on the hardness of eroded dentin.

MATERIALS AND METHODS

40 extracted sound human premolars with premeasured hardness values were immersed in Coke for five minutes and then immersed in a green tea solution for five minutes. The surface hardness was remeasured with a Vickers diamond under a load of 500g/10s immediately after each immersion.

All hardness values were compared with pretreatment values by the Wilcoxon test.

RESULTS

The mean ± SD of hardness values before and after insertion in coke was 48.12 ± 1.69 and 45.47 ± 1.55 respectively. The hardness values after immersion in green tea were and 54.32 ± 2.17 with statistically significant differences between the two measurements. Thus, green tea aided in the repair of the eroded dentine by increasing its hardness.

CONCLUSION

Aerated acidic beverages cause dentinal erosion and decreased surface hardness. Green tea is a healthy beverage with many medicinal effects that increase the hardness of dentin, thus forestalling erosion. Therefore, the consumption of green tea is the most easy, simple and non-expensive method to intercept and treat dentinal erosion and should be promoted.

KEYWORDS: Dentinal Erosion, Green Tea, Matrix Metalloproteins & Micro-hardness

Received: Jan 18, 2018; Accepted: Feb 07, 2018; Published: Mar 20, 2018; Paper Id.: IJDRDJUN20183