

## **A clinical investigation of low-level laser irradiation on hypersensitive dentine**

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### **Abstract**

**Purpose:** The study was conducted to evaluate the efficacy of low power diode laser for the treatment of dentin hypersensitivity, to assess the reliability of two pain measurement methods. **Materials and Methods:** Twenty seven patients with a history of dentin hypersensitivity were selected and 54 exposed sensitive teeth were divided into test and control groups. In the test group 1, a low power laser (685 nm, 25 mW, 2 J/cm<sup>2</sup>) was used in hypersensitive teeth for one minute and forty seconds. The dentin hypersensitivity of all teeth was measured with VAS (Visual Analogue Scale). **Results:** After desensitizing procedures, most of the patients reported distinct reductions in dentin sensitivity at the baseline. The statistical analysis of patient's data revealed statistically significant differences between the baseline measurement and examination periods. Furthermore, the statistical analysis indicated that an air-blast stimulus is a more reliable method than tactile stimuli in dentin hypersensitivity. **Conclusion:** The results of the present study demonstrated that the laser irradiation is efficient in the treatment of hypersensitivity.