Efficacy of Three Desensitizing Agents to Reduce Cervical Dentin Hypersensitivity: A Randomized Clinical Trial

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ABSTRACT

Introduction: Dentin hypersensitivity (DH) is a commonly encountered dental complaint, management of which is often challenging to dentist. It occurs when dentinal tubules are patent both at the pulpal and the oral surface. It is widely accepted that DH affects function and quality of life. Thus it is necessary for dentist to manage it properly.

Objective: To compare the efficacy of Gluma, Vivasens and Propolis desensitizing agents in reducing cervical dentin hypersensitivity and to evaluate relief from DH using the desensitizing agents immediately, at 1 week and 4 weeks .

Materials and Method: A Randomized Clinical Trial, double blinded, parallel group study was conducted among forty five patients. They were randomly allocated into three different groups (n=15): Gluma(positive control), Vivasens and Propolis. Tactile and evaporative methods were used to assess sensitivity using Numeric Rating Pain Scale in patients with cervical abrasion, with a complaint of dentin hypersensitivity. Sensitivity score was recorded preoperatively, immediately after application, at 1 week and 4 weeks postoperatively.

Result: All three desensitizing agents significantly reduced DH scores from baseline to all subsequent follow-ups (p<0.001). Kruskal–Wallis test elicited no significant differences in the mean difference in DH scores among positive control and test groups for both stimuli at all time intervals (p < 0.05).

Conclusion: These three desensitizing agents were effective in relieving DH. However, no statistically significant difference was found in relieving DH among the agents.

Keywords: Cervical abrasion, dentin hypersensitivity, desensitizing agent.

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