ABSTRACT

TITLE: COMPARATIVE EVALUATION - IN OFFICE TREATMENT OF ROOT DENTIN SENSITIVITY WITH IONTOPHORESIS: A RANDOMIZED CLINICAL TRAIL.

Background

The aim of this study was to determine the effectiveness of three desensitizing agents 2% sodium fluoride, 1.23% acidulated phosphate fluoride and 10% propolis along with iontophoresis in reducing root dentin sensitivity immediately after application and postoperative 14 and 28 days after ultrasonic scaling.

Materials & Methods

72 patients enrolled in this study. All participants received ultrasonic scaling followed by application of any one of the desensitizing agents along with iontophoresis. Root dentin sensitivity was evaluated using three different clinical parameters: tactile test (VAS) with pressure sensitive probe, air test (Schiff scale) with three way syringe and cold water test (VAS).

Results

All the three groups showed significant reduction of sensitivity (<0.01) immediately after application during baseline and 14th day. Postoperative 14th and 28th day showed significant reduction (<0.01) compared to the baseline. Intergroup comparison showed significant reduction (<0.05) in sodium fluoride when compared with acidulated phosphate fluoride and propolis for tactile test during postoperative 14th day before application. Similarly acidulated phosphate
fluoride showed significant reduction (<0.05) than propolis for cold water test on the baseline after application.

**Conclusion**

Root dentin sensitivity which occurs following ultrasonic scaling can be effectively managed with 2% sodium fluoride, 1.23% acidulated phosphate fluoride and 10% propolis along with iontophoresis.

**Keywords:** Root dentin sensitivity, Ultrasonic scaling, Sodium fluoride, Acidulated phosphate fluoride, Propolis, Iontophoresis, Tactile test, Air test, Schiff scale, Cold water test.