

Effect of Placebo Medication on Pain Perception During Scaling and Root planning

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Abstract

Background and Aim: Placebo analgesia has not been investigated extensively in dental settings. Using scaling and root planning (SRP) as a model, this investigation aimed at evaluating the placebo analgesia during SRP.

Materials and Methods: Patients participated in this double-blind, randomized, controlled clinical trial. Having signed an informed consent form, and obtaining demographic characteristics, all the individuals filled a modified dental anxiety index questionnaire. Based on random blocks, 91 patients were given one placebo capsule 30 minutes before SRP as a potent pain killer, and 91 control subjects received SRP alone. Pain was recorded using a 10 centimeter VAS as well as a 5-point verbal Likert scale (VRS-5) during SRP for each sextant of dentition. Statistical analysis was done by chi-square, Spearman correlation coefficient, and Mann-U-Whitney tests using SPSS software version 19.

Result: There was no statistical difference between placebo and control groups regarding anxiety, age, sex, pocket depth, and clinical attachment level ($P > 0.05$). VAS and VRS-5 scores were not statistically different between case and control subjects using Mann-Whitney test. Spearman rank test revealed a correlation between the two pain measuring methods ($P < 0.0001$).

Conclusion: Within the limitations of this study, the placebo medication is not capable of reducing pain during SRP.

Keywords: *Placebo; Scaling; Pain*