

Intrapocket Anesthesia for Scaling and Root Planing in Pain-Sensitive Patients

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Abstract

Background: In 2 previous multicenter studies evaluating the efficacy of a novel anesthetic gel (lidocaine 25 mg/g plus prilocaine 25 mg/g), there was a rather small, although statistically significant, overall difference between the active and placebo gels. There were, however, large center variations. At centers where the placebo-treated patients reported high pain scores, the difference between treatments was large, suggesting that the anesthetic gel is most effective in patients who experience the procedure as painful. The present multicenter, double-blind, randomized study evaluated the anesthetic effect of this gel in pain-sensitive patients by using a visual analog scale (VAS) and a verbal rating scale (VRS).

Methods: One hundred thirteen (113) patients with moderate to severe periodontitis were screened for pain sensitivity upon probing. Eighty-five reported VAS ≥ 30 mm on probing and were included in the treatment phase (43 anesthetic and 42 placebo gel). The periodontal pockets of one quadrant in each patient were treated with gel for 30 to 45 seconds, followed by scaling and/or root planing.

Results: The results were similar between centers. The median overall VAS pain score was 11 mm in the anesthetic group and 27 mm in the placebo group. The Hodges-Lehmann point estimate of the treatment difference was 10 mm ($P = 0.004$). No pain or only mild pain was reported by 70% in the anesthetic group and by 48% in the placebo group ($P = 0.003$). Two patients in the anesthetic group and 7 patients in the placebo group required rescue anesthesia.

Conclusions: This study confirms the favorable anesthetic efficacy of active gel over placebo in selected pain-sensitive patients. It suggests that the gel may be a valuable alternative to conventional injection anesthesia. *J Periodontol 2003;74:597-602.*