Short Term Clinical Efficacy of New meridol® HALITOSIS tooth & tongue gel in Combination with a Tongue Cleaner to Reduce Oral Malodor

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Abstract

• Objective: This study evaluated the short term efficacy of tongue cleaning with meridol® HALITOSIS tooth & tongue gel in comparison to mechanical tongue cleaning alone and untreated after five and 60 minutes in patients with an oral cause of bad breath.

• Methods: Fifty-four male and female subjects with an intra-oral cause of halitosis (organoleptic ratings ≥ 2 and volatile sulphur compounds ≥ 50 ppb) participated in this crossover study and were assigned to six different treatment sequences (ABC, ACB, BAC, BCA, CAB, CBA) with no treatment (A), mechanical tongue cleaning alone (B), and tongue cleaning with tooth & tongue gel applied to the tongue cleaner (C). Efficacy was assessed by organoleptic ratings and volatile sulphur compound measurements five and 60 minutes after treatment.

• Results: Cleaning the tongue with tooth & tongue gel applied onto the tongue cleaner resulted in significantly reduced organoleptic ratings (p < 0.001 for the five-minute assessment; p = 0.001 for the 60-minute assessment) and volatile sulphur compounds (H₂S + CH₃SH: p = 0.005 for the five-minute assessment; p = 0.003 for the 60-minute assessment) compared to no treatment at the five- and 60-minute assessment time points, while mechanical tongue cleaning alone was less effective in reducing organoleptic ratings (p = 0.008 for the five-minute assessment; p = 0.144 for the 60-minute assessment) and volatile sulphur compounds (H₂S + CH₃SH: p = 0.261 for the five-minute assessment; p = 0.365 for the 60-minute assessment).

• Conclusions: Single tongue cleaning with meridol HALITOSIS tooth & tongue gel had a positive effect on halitosis five and 60 minutes after treatment. Tongue cleaning with tooth & tongue gel in combination with other oral hygiene procedures is a promising approach to control halitosis.

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