

Comparative Evaluation of Herbal and Conventional Mouthwashes on Gingival Health: A clinical study from northern Italy

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Introduction: The rising interest in natural alternatives to chemical agents in oral care has led to the widespread use of herbal mouthwashes. However, limited clinical evidence exists to validate their efficacy compared to conventional chlorhexidine-based rinses. This study aims to compare the effectiveness of herbal versus conventional mouthwash in improving gingival health among patients with mild to moderate gingivitis in Northern Italy.

Methodology: A randomized controlled trial was conducted at a dental clinic in Milan with 120 participants diagnosed with gingivitis. Participants were randomly divided into two groups: Group A (Herbal Mouthwash containing neem, clove, and tea tree oil) and Group B (0.12% Chlorhexidine mouthwash). Both groups were instructed to rinse twice daily after brushing for four weeks. Gingival Index (GI) and Plaque Index (PI) were recorded at baseline, 2 weeks, and 4 weeks. Adverse effects and patient satisfaction were also evaluated using a structured questionnaire.

Results: Both groups demonstrated significant improvement in GI and PI scores over the 4-week period. Group B (chlorhexidine) showed slightly faster improvement by the second week, but by the fourth week, Group A's results were statistically comparable ($p > 0.05$). Notably, fewer adverse effects (such as taste alteration and staining) were reported in the herbal group, and 78% of participants preferred the herbal option for long-term use..

Conclusion: Herbal mouthwashes provide comparable efficacy to conventional chlorhexidine in improving gingival health, with better patient tolerance and fewer side effects. These findings support the integration of herbal alternatives into routine dental care, especially for patients seeking natural oral hygiene solutions.

Biography

Giulia Romano, DDS, is a practicing dentist and clinical researcher from Florence, Italy. She earned her Doctor of Dental Surgery from the University of Bologna and has focused her research on preventive dentistry and alternative therapeutic approaches. Dr. Romano is passionate about merging evidence-based science with holistic dental care methods.

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