



Full-mouth disinfection versus quadrant/sextant therapy: an integrative review

Alessandra Profeti ¹  0009-0006-6703-5461
Filipe Augusto Martins ²  0000-0002-8460-6178
Tiago José Martins ²  0000-0001-9292-2317

¹ Faculty of Health Sciences, Fernando Pessoa University, Porto, Portugal

ARTICLE INFO

Received 15 May 2026
Accepted 23 June 2026

Keywords:

periodontitis
full mouth disinfection
non-surgical periodontal treatment
quadrant treatment
scaling and root planning

Corresponding Author:

Alessandra Profeti; Fernando Pessoa University - Faculty of Health Sciences, Porto, Portugal; alessandraprofetio2@gmail.com

DOI: 10.62741/ahrj.v3iSuppl.2.224

This article is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License.

ABSTRACT

Introduction: Periodontitis is a chronic inflammatory disease of bacterial origin that affects the tooth-supporting tissues, leading to progressive destruction of the alveolar bone and, in advanced stages, tooth loss. Non-surgical periodontal therapy represents the primary treatment approach and is mainly based on scaling and root planning. Traditionally, this therapy is performed by quadrants or sextants over multiple sessions. Alternatively, the full-mouth disinfection protocol has been proposed.

Objectives: To compare the clinical efficacy of full-mouth disinfection and conventional quadrant/sextant scaling and root planning, Regarding probing depth, clinical attachment level, and bleeding on probing.

Methodology: A literature review was conducted using the PubMed, Cochrane Library, and Scielo databases. Articles published between 2010 and 2025 in Portuguese or English were included. The selected study designs included systematic reviews, meta-analyses, randomized controlled clinical trials, prospective cohort studies, longitudinal observational studies, and clinical case reports performed in humans. Studies that did not meet the inclusion criteria were excluded. The search strategy followed the PICO model and study selection was performed according to the PRISMA flow diagram.

Results: Both therapeutic protocols provide significant clinical improvements in periodontal parameters. Both full-mouth disinfection and conventional quadrant/sextant SRP demonstrated similar reductions in probing depth and improvements in clinical attachment level, as well as decreases in bleeding on probing. However, some studies suggest that the Both full-mouth disinfection protocol may allow a faster reduction of periodontal inflammation during the early treatment phase.

Conclusion: Full-mouth disinfection and conventional quadrant/sextant therapy show comparable clinical effectiveness in the treatment of periodontitis. The choice of protocol should consider clinical and organizational factors as well as patient-specific needs.

Contributions: Conceptualization: AP, FAM and TJM; Data curation: AP; Formal Analysis: AP; Funding acquisition: Not applicable; Investigation: AP; Methodology: AP, FAM and TJM; Project administration: Not applicable; Resources: Not applicable; Software: Not applicable; Supervision: FAM and TJM; Validation: FAM and TJM; Writing – original draft: AP; Writing – review & editing: FAM and TJM.

Please cite this article as: Profeti A, Martins FA, Martins TJ. Full-mouth disinfection versus quadrant/sextant therapy: an integrative review. *Athena Health & Research Journal*. 2026; 3(Suppl. 2). doi: 10.62741/ahrj.v3iSuppl. 2.224