

Title : Assessing the Impact of Smoking Cessation Interventions on Periodontal Health and Gingival Inflammation in Smokers with Periodontitis

Author Names: Mohammed E. Rashid, Mohammad K. Alam, Khaleda Akhter, Abedalla Abdelghani, Hamzah A. Babkair, Mohammed G. Sghaireen

Abstract: Background: Smoking is a well-established risk factor for periodontitis, a chronic inflammatory disease of the oral cavity. While smoking cessation has been linked to improved overall health, its specific impact on periodontal health and gingival inflammation in individuals with periodontitis remains less explored. Materials and Methods: We conducted a prospective cohort study involving 200 smokers diagnosed with periodontitis. Participants were divided into two groups: Group A received comprehensive smoking cessation interventions, including counseling and pharmacotherapy, while group B continued smoking without intervention. Periodontal health was assessed through clinical parameters, including probing depth (PD) and clinical attachment level (CAL), at baseline and 6 months post intervention. Gingival inflammation was evaluated using the Gingival Index (GI). Results: After 6 months, group A exhibited a significant reduction in mean PD (from 4.5 mm to 3.2 mm) and CAL (from 5.0 mm to 3.5 mm) compared to group B. Conversely, group B showed no significant change in these parameters. The GI score significantly decreased in group A (from 2.8 to 1.2) but remained unchanged in group B. Furthermore, group A demonstrated a higher rate of smoking cessation (72%) compared to group B (14%). Conclusion: Smoking cessation interventions play a crucial role in improving periodontal health and reducing gingival inflammation in smokers with periodontitis. The observed reductions in PD, CAL, and gingival inflammation highlight the potential benefits of smoking cessation on oral health outcomes in this high-risk population

Keywords: Clinical parameters, gingival inflammation, intervention, oral health, oral hygiene, periodontitis, smoking cessation

DOI: [10.4103/jpbs.jpbs.987.23](https://doi.org/10.4103/jpbs.jpbs.987.23)

https://journals.lww.com/jpbs/fulltext/2024/16001/assessing_the_impact_of_smoking_cessation.216.aspx