

Clinical effect of Aloe vera as supplement to periodontal therapy: a systematic review and meta-analysis

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Abstract

Abstract Aims: The objective of this systematic review and meta-analysis was to investigate clinical efficacy of Aloe vera (AV) as a supplement to scaling and root planing (SRP) for conventional dental treatment . **Methods:** A comprehensive and systematic search for randomized controlled trials (RCTs) conducted before August 2021 was carried out in PubMed, Cochrane Library, Embase, and Web of Science. Twelve studies met the eligibility criteria to be synthesized in the qualitative analysis, and four eligible publications were included in the meta-analysis. A meta-analysis was performed to quantitatively evaluate the periodontal parameters. **Results:** Four studies were included. Adjunctive AV treatment reduced PPD (MD: -0.71;-1.32/-0.09) at 6 months and PPD (MD: -1.39;-3.02/0.23) at 12 months in respect to the control group at 6 months. Adjunctive AV treatment reduced CAL (MD: -0.64;-1.13/-0.15) at 6 months and CAL (MD: -1.62;-2.79/-0.44) at 12 months in respect to the control group. **Conclusions:**The adjunctive use of Aloe vera in SRP results in improved treatment outcomes, compared with SRP alone/placebo. However the evidence was not strong enough to safely base any clinical recommendation, further investigation is needed to establish the clinical efficacy of Aloe vera. **Keywords:** periodontal treatment; Aloe vera; periodontitis; meta-analysis; periodontal disease; systematic review

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