



Effects of *Aloe vera* (L.) Burm. f. in gingivitis: a review of clinical trials

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Background and objectives: Gingivitis is the inflammation of gingiva which, unless treated, will lead to periodontitis in susceptible patients. *Aloe vera* (L.) Burm. f. (aloe) from the family Asphodelaceae (Liliaceae) is a perennial plant which originates from South Africa. Potentially active compounds of the leaves include vitamins, simple/complex polysaccharides, minerals, organic acids, and phenolic compounds. The aim of this study was to review the literature regarding the efficacy and safety of aloe in patients with gingivitis. **Methods:** Using the search formula "Gingivitis [title/abstract] AND *Aloe vera*/Aloe [all fields]", electronic databases, including PubMed, Scopus, Science direct and Cochrane library were searched for clinical trials on treatments containing aloe for gingivitis and relevant articles with English full-text from 2000 until 2017 were finally included. **Results:** Total of 8 clinical trials were finally included in this paper. Various preparations of aloe such as mouth rinse and dentifrice have been investigated in patients with gingivitis. Each study has measured the periodontal health via a specific index including plaque index, gingivitis index, and bleeding index, as well as the microbial count and composition of the oral cavity and biomarkers of inflammation in crevicular fluid and aloe could significantly improve the above mentioned parameters. **Conclusion:** It was concluded that aloe could improve periodontal health either alone or as an adjunct to scaling and root planning treatments. Some studies also proved its efficacy to be equal to other commercially available products such as chlorhexidine without having their side effects.

Keywords: *Aloe vera*, gingivitis, oral cavity
