



## Management of recurrent aphthous stomatitis with medicinal herbs and their related phytochemicals in clinic: review

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**Background and objectives:** Recurrent aphthous stomatitis (RAS) is one of the most common painful mucosal diseases seen in the oral cavity of patients. Pathogenesis and etiology of this disorder is still unclear. RAS is categorized into minor, major, and herpetiform ulcers. Ulcers classified as minor, consist more than 85% cases of RAS. The goal of this study was to review the efficacy of medicinal plants and their bioactive phytochemicals used in clinical trials in the management of the recurrent aphthous lesions. **Methods:** Different electronic resources including Science Direct, Scopus, PubMed, Web of Science, and Cochrane Library were used as the searching engines. The key words were 'plant', 'phytochemical', or 'herb' and 'aphthosis', 'aphthous', 'aphthae', 'aphthous ulcer', 'recurrent aphthous stomatitis', or 'aphthous stomatitis'. Finally, all the relevant clinical trials were regained. **Results:** The results showed that plants such as *Satureja khuzistanica*, *Glycyrrhiza glabra*, *Alchemilla vulgaris*, *Matricaria chamomilla*, *Punica granatum* var. *pleniflora*, *Myrtus communis*, *Melissa officinalis*, *Rosa damascena*, *Aloe vera*, *Nicotiana tabacum*, and bioactive ingredients like acemannan and berberine possessed potential beneficial effects in oral diseases and could be effective in decreasing ulcer size, pain intensity, duration of complete lesion healing, average time of pain elimination, aphthae number, diameter of inflammatory halo and necrotic zone of the ulcer and provided satisfaction in patients who suffered from RAS. **Conclusion:** The findings of this study revealed that herbal medicines could be considered as future pharmaceutical drugs or adjuvant treatments to improve their efficacy and alleviate the side effects in the management of RAS.

**Keywords:** herb, phytochemical, recurrent aphthous stomatitis

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