

Aloe Vera: The Herbal Panacea in Dentistry

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Dear Editor In Chief,

Aloevera is used from more than 2000 years ago, it is well known for its medical properties and also called as the Universal Panacea in Greek. Written history of the aloevera for the treatment of wounded soldiers of Alexander and Christopher Columbus is also there.¹

The word “Alloe” is an Arabic word meaning “shining bitter substance” while the “vera” is a latin one meaning of which is “true”. Botanical name of Aloe vera is “Aloe barbadensis miller”, belongs to Asphodelaceae (Liliaceae) family, and it is a shrubby, perennial, succulent, xerophytic, pea- green color plant. It mainly grows in the dry regions of Africa, Europe, Asia and America.² The plant consists is of two different parts, each of which produces completely different substances with completely different compositions and therapeutic properties. The inner portion of the aloe leaves produces the aloe vera gel, a clear, thin, tasteless, jelly- like material & the other part of the plant produces exudates that consist of bitter yellow latex with powerful laxative-like actions.³

The pharmacological actions of aloevera includes antibacterial, hypoglycaemic, anti-inflammatory and anti-arthritis activity. It contains 75 potentially active constituents which include vitamins, enzymes, minerals, salicylic acids, saponins, sugars, lignin, and amino acids. Evidence suggested that it is effective in reducing blood glucose in diabetic patients and in lowering blood lipid levels in hyperlipidaemia. Topical use of the alovera is proven to be effective in genital herpes and psoriasis. Despite of this it is also

used in arthritis, digestive and bowel disorders and also in skin problems (e.g. eczema, acne, burns, athlete’s foot, cold sores).^{4,5}

These days several herbal therapies are gaining popularities in the field of dentistry. Many new clinical trials of the herbal therapies are being undertaken and published each year. Aloe vera gel formula is nontoxic, bactericidal and fungicidal against a broad range of micro-organisms. It also has several uses in dentistry.⁶

Health benefits of Aloe Vera⁷:

1. Aloe vera juice helps in digestion of food.
2. It increases the energy level & also helps in building immunity.
3. Aloe vera helps in detoxification and also in reducing inflammation.
4. It also have moisturizing properties and used in moisturizers, soaps, sunscreens and shampoo.
5. Aloe vera also helps in promoting the rate of wound healing.

Uses of Aloe vera in Dentistry:

1. **Apthous Ulcers:** Healing of the apthous ulcer is promoted by acemannan hydrogel and it also helps in reducing pain associated with it.⁸
2. **Healing of Extraction Sockets:** Acemannan hydrogel which is a component of the aloe vera proven to reduce the incidence of alveolar ostitis.

When used immediately after extraction at extraction site.⁹

3. **Oral Lichen Planus:** It has been seen that the use of aloe vera gel topically and intake of aloe vera juice helps in clearing the oral lesion within a period of four weeks. The systemic lesion may take longer to get cured.¹⁰
4. **Gingivitis:** when compared to chlorhexidine mouthwash Aloe vera mouthwash can be an effective antiplaque agent and it can become a herbal substitute with appropriate refinements in taste and shelf life at an affordable price.¹¹
5. **Decontamination of Gutta-Percha points:** The importance of gutta percha decontamination to prevent contamination of the root canal with bacteria during the obturation procedure is now widely recognized in endodontic practice. Aloe vera gel is proven to be used as a decontaminant which helps in removing the bacteria within a minute.¹²
6. **Halitosis:** Aloe vera juice in combination with apple juice is proven to have a potent digestive properties. The main cause behind the bad breath is indigestion thus it helps in improving the halitosis problem.¹³
7. **Denture Adhesives:** It is Sticky & viscous in nature thus it helps in providing adequate adhesive strength to the denture in both wet and dry conditions.¹⁴

Despite of all these functions of aloevera it is also used directly at the site of periodontal surgeries, as an adjunct to scaling and root planning. It is also used in chemical burns caused by the aspirin ingestion, angular cheilitis and burning mouth syndrome. Patients with sore gums and teeth with dentures maladaptive may also benefit.¹⁵

Aloevera is a promising herb for many oral problems, extensive research on it is necessary.

References:

1. Surjushe A, Vasani R, Saple DG. Aloe vera: a short review. *Indian J Dermatol.* 2008; 53(4): 163–166.
2. Meena M, Figueiredo NR, Trivedi K. Aloe vera – An Update for Dentistry. *Journal of Dentofacial Sciences.* 2013; 2(4): 1-4
3. Jain S, Rai R. Aloe-Vera: A Boon In Management Of Dental Disease. *Int. J. Pharm. Res. Sci.,* 2014, 02(1), 18-24.
4. Vogler BK, Ernst E. Aloe vera: a systematic review of its clinical effectiveness. *Br J Gen Pract,* 1999, 49, 823-828.
5. Itrat M, Zarnigar. Aloe vera: a review of its clinical effectiveness. *Int. Res. J. Pharm.* 2013;4 (8): 75-9
6. Taheri JB, Azimi S, Rafieian N, Zanjani HA. Herbs in dentistry. *International Dental Journal* 2011; 61: 287–296
7. Rajeswari, R., Umadevi, M., Rahale, C. S., Pushpa, R., Selvavenkadesh, S., Kumar, K. S., & Bhowmik, D. Aloe vera: The Miracle Plant Its Medicinal and Traditional Uses in India. *Journal of Pharmacognosy and Phytochemistry.* 2012; 1(4): 118-124
8. “Oral ulcers remedy gets FDA clearance,” *The Journal of the American Dental Association,* vol. 125, pp. 1308–1310, 1994.
9. Poor MR, Hall JE, Poor AS. Reduction in the incidence of alveolar osteitis in patients treated with the SaliCept Patch, containing acemannan hydrogel. *J Oral Maxillofac Surg* 2002;60(4):374-379.
10. Hayes SM. Lichen planus—Report of successful treatment with aloe vera. *Gen Dent* 1999;47(3):268-272.
11. Chandras B1, Jayakumar A, Naveen A, Butchibabu K, Reddy PK, Muralikrishna T. A randomized, doubleblind clinical study to assess the antiplaque and antigingivitis efficacy of Aloe vera mouth rinse. *J Indian Soc Periodontol.* 2012 Oct;16(4):543-8.
12. Athiban PP, Borthakur BJ, Ganesan S, and Swathika B. Evaluation of antimicrobial efficacy of Aloe vera and its effectiveness in decontaminating gutta percha cones. *J Conserv Dent.* 2012 Jul-Sep; 15(3): 246–248.
13. Kathuria, N., Gupta, N., & Prasad, R. Biologic Effects Of Aloe Vera Gel. *The Internet Journal of Microbiology.* 2011; 9(2)

14. Tello CG, Ford P, Iacopino AM. In vitro evaluation of complex carbohydrate denture adhesive formulations. *Quintessence Int* 1998;29(9):585-593.
15. Sundarkar P, Govindwar R, Nyamati SB, Alladwar N, Rhombre V, Soni A, Raj A. Use of aloe vera in dentistry. *Journal of Indian Academy of Oral Medicine and Radiology*. 2011; 23(3):S389-391

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