



Treatment for oral lichen Planus Lesions Involves the use of alovera

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Abstract

Aloe Vera, sometimes called Barbados or Curacao Aloe, is a widely used herbal remedy that has been used for many years by many different cultures. Growing in arid and subtropical regions, the succulent plant is most known for two different preparations: the thick sap of the leaves, which turns yellow-brown and has strong laxative effects that caution its use, and the clear, mucilaginous gel that is widely used to treat minor burns, especially sunburns. From topical applications to reduce sweating to oral doses for diabetes and various gastrointestinal disorders, the clear mucilaginous gel has a wide range of traditional uses. Clinical research have demonstrated that aloe versa gel is effective in treating burn wounds, genital herpes, and seborrheic dermatitis; however, results are still pending for other indications, such as psoriasis or internal use in the treatment of type 2 diabetes. Small clinical research with typically non-rigorous methodology are the primary limitation of current clinical knowledge regarding aloe Vera gel. Numerous clinical investigations are being carried out to confirm the traditional applications of the plant extract and to assess the efficacy of aloe Vera gel in treating a range of illnesses.

Key words– Alovera, Lichen planus, Anti-inflammatory, Alovera Gel

Introduction

For thousands of years, Aloe Vera (syn. Aloe barbadensis Mill., Fam. Liliaceae), also known as Barbados or Curacao Aloe, has been used in traditional and folk medicines to treat and cure a variety of diseases. Although the plant is native to northern Africa, it has quickly spread around the world due to its ease of cultivation. The clear mucilaginous gel must be distinguished from the strongly laxative and purgative latex derived from bundle-sheath cells. Egyptians, Assyrians, and Mediterranean civilizations, as well as Biblical times, used the plant.

In Trinidad and Tobago, aloe Vera gel is used as an ethnomedical remedy for hypertension.² Aloe has traditionally been used in folk medicine to treat burn wounds, particularly to promote healing, lessen

inflammation, and lessen tissue scarring. Dioscorides described the gel, which was used to heal sores, reduce itching, and treat wounds and mouth infections. Clinical trials have demonstrated the efficacy of aloe Vera gel in treating burn wounds, genital herpes, and seborrheic dermatitis, but other indications such as psoriasis or internal application for the treatment of type 2 diabetes remain inconclusive. The primary use of aloe vera gel is as a skin moisturizer in cosmetics and as an after-treatment for sunburns, for which it has been shown to be effective.^{8,9}

Classification of Aloe Vera

- Kingdom Plantae
- Clade Angiosperms
- Clade Monocots
- Order Asparagales
- Family Asphodelaceae
- Subfamily Asphodeloideae
- Genus Aloe
- Species A. Vera

Synonyms: Aloe, Musabbar, Lolesara (in kannada)

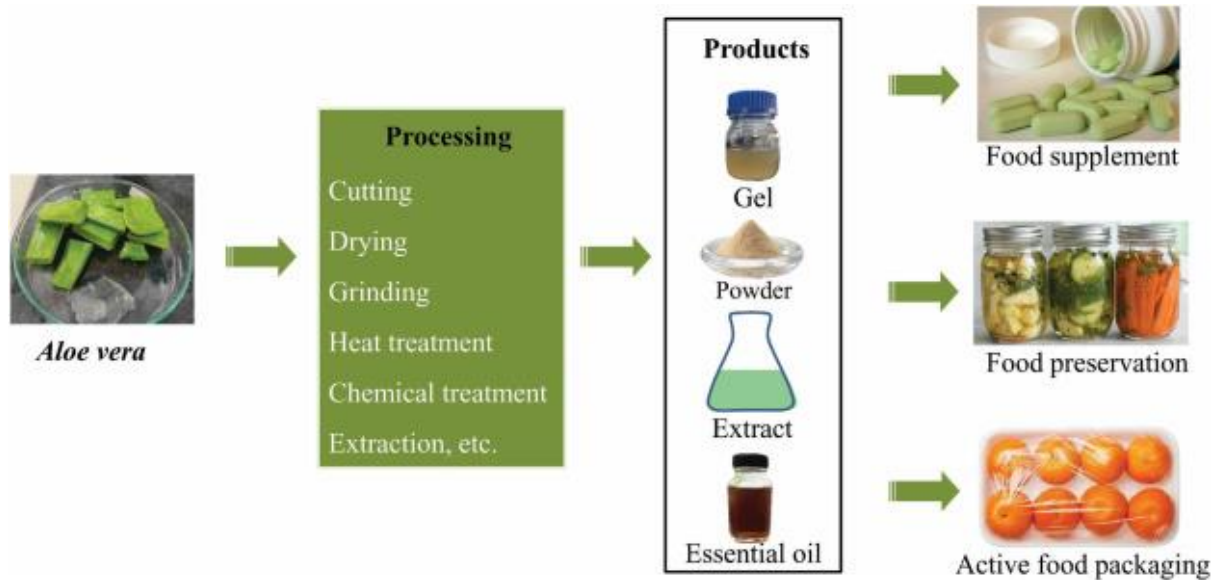
Family: Liliaceae

Botanical Name(s): Aloe barbadensis, Aloe indica, Aloe barbados, Aloe vera



The following is a list of aloe Vera benefits.

- It supports and purifies our digestive system.
- Our skin is hydrated by it.
- It calms and encourages skin regeneration
- It bolsters the immune system.



Medicinal Effects

The precise chemical composition of the aloe Vera inner gel used for the majority of the pharmacological activities listed below is unknown. As a result, results should be interpreted cautiously in terms of reproducibility of the stated effect.

Human

Burn wounds ranging from mild (first degree) to moderate (second degree) genital herpes at first onset seborrheic dermatitis; 17 oral lichen planus infections, wound healing, gastric pH normalization 44 diabetes and angina pectoris treatment.

Suggested Action Mechanisms

- Increased fibroblast and macrophage activity, as well as the synthesis of collagen and proteoglycans.
- Fibroblasts' growth factor receptors are bound by mannose-6-phosphate, which increases the activity of the cells.
- Thromboxane A₂36–53 Inhibition

- The historical application of aloe Vera gel for the treatment of wounds has been evaluated in surgical wounds and the randomized study concluded that there was a significant delay in complete wound healing for the aloe Vera gel compared to standard treatment.
- The use of aloe Vera gel for the treatment of lichen planus lesions was examined in 2 clinical trials with small sample sizes.
- One study examined the use of aloe Vera gel (containing 70% mucilage) in oral lichen planus lesions compared to placebo over 8 weeks and found a significant improvement in 88% of patients versus 4% in the placebo group.
- Another study used a similar design but with unspecified composition of the aloe vera gel and reported significant improvement in 82% of patients versus 5% in the placebo group over a period of 8 weeks

Clinical evaluation

Chronic inflammatory oral lichen planus (OLP) is characterized by lacy, white-gray lesions in the mouth that impair the oral cavity's mucous membrane. Studies are being conducted on alternate therapies because the first-line therapy for OLP, corticosteroids, has been linked to several negative effects when used chronically. Aloe vera used topically and low-level laser therapy (LLLT) are two examples of such therapies. Aloe Vera gel has historically been used to treat wounds, including surgical wounds. A randomized study found that using aloe Vera gel significantly delayed the healing process when compared to standard treatment.

Two small-scale clinical trials looked at the efficacy of aloe Vera gel in treating lichen planus lesions. In a study, the application of aloe Vera gel (which contains 70% mucilage) for eight weeks was compared to a placebo for oral lichen planus lesions. The results showed that 88% of patients showed a significant improvement, while only 4% in the placebo group did.

For cuts, scrapes, and other oral lesions, aloe Vera can be used topically. The advantages of this plant include a faster healing period whether applied topically or taken as a drink. Aloe Vera helps calm and reduce discomfort in the oral tissue, in addition to hastening the healing process of these problems. The yellow latex that is located between the leaf skin and the gel is frequently used to treat constipation, but the gel, or "meat," offers a number of health advantages. The sliced-off leaves are sometimes eaten, despite the fact that they are usually bitter and rough.

Sweet Aloe:

Even with its original qualities preserved, the product is edible. There is concentrated (200–300%) version of Aloe Vera polysaccharides (AVPS).

Aloe Gum:

This is an edible substance with unaltered natural qualities, such as AVPS.

Aloe Crack Lotion:

For dry, parched skin and cracked feet, the cream works wonders. In addition to softening and moisturizing the skin, it promotes the healing of skin blemishes and cracks.

Aloe Vera Shampoo:

It minimizes hair loss and leaves hair feeling smooth, lustrous, and free of dandruff.

Hair Nourishing Cream with Aloe:

Hair is made stronger and less likely to fall out.

Aloe Hydrator:

The best use case for it is normal to oily skin. It gives skin a glowing, silky appearance. It gets rid of the black spots on the skin that come from being cold.

Aloe Extract:

This is a summer-appropriate moisturizer that can promote hair growth if used regularly to the scalp.

Studies have shown that aloe gel might be effective in treating skin conditions including:

- Psoriasis.
- Seborrhea.
- Dandruff.
- Minor burns.
- Skin abrasions.
- Skin injured by radiation.
- Herpes sores.
- Acne.

Research Through Innovation

METHODS-

1. Aloe Vera Juice Processing Machine-

Using this machine, the outer pulp of aloe Vera leaves can be removed without causing any harm to the inner gel.



2. Containers:

Help for moving and storing the items that make up a unit load



3. Refrigerator:

It is possible to prolong the shelf life of fresh aloe Vera gel by refrigerating it in an airtight container for up to one week. As soon as anything starts to go bad, discard it: Try to find any odors or discolorations.



4. Extracting leaves from Aloe Vera:

Every six to eight weeks, the plants can be harvested by removing three to four leaves from each plant. Normally, aloe vera leaves are susceptible to temperatures below freezing. The timetable for processing aloe vera is greatly impacted by the weather. Harvesting the Aloe vera plant involves pulling back the green leaf and making a cut at the white base.



Uses of Aloe Vera

Because aloe vera has been used for thousands of years, products containing it are trusted. Humans have been using aloe vera for more than 5,000 years. Due to its remarkable properties, this extraordinary plant was revered by the earliest civilizations. The fabled benefits of aloe vera have been passed down through the ages, augmented by centuries of experience and scientific advancements.

Conclusion

In conclusion, more clinical evidence from carefully planned studies with precise aloe extracts and corresponding placebo controls is required before aloe vera gel or any of its constituents can be used to treat a range of ailments and diseases. As of June 2012, the United States National Institutes of Health clinical trial database lists five national and international clinical studies, the majority of which focus on using aloe vera to treat wounds.¹²² This demonstrates the importance of aloe vera gel in science and the need to prove it can effectively treat wounds. Nonetheless, numerous clinical investigations have established the safety of aloe vera gel when applied topically.

Reference

1. Serrano M, Valverde JM, Guillén F, Castillo S, Martínez-Romero D, Valero D (May 2006). "Use of Aloe vera gel coating preserves the functional properties of table grapes". *Journal of agricultural and food chemistry* **54** (11): 3882–6.
2. Source- wikipedia
3. Sumbul S, Ahmed S, Waseemuddin, Azhar Iqbal (2004). "Antifungal activity of *Allium*, *Aloe*, and *Solanum* species". *Pharmaceutical Biology* **42** (7): 491–498.
4. Vogler BK, Ernst E (1999). "Aloe vera: a systematic review of its clinical effectiveness". *Br J Gen Pract* **49**: 823–828.
5. Tyler V. *The honest herbal: A sensible guide to the use of herbs and related remedies*. 3rd ed. Binghamton, New York: Pharmaceutical Products Press; 1993.
6. Atherton P. Aloe vera revisited. *Br J Phytother*. 1998;4:76–83.
7. Shelton M. Aloe vera, its chemical and therapeutic properties. *Int J Dermatol*. 1991;30:679–83.

8. Atherton P. The essential Aloe vera: The actions and the evidence. 2nd ed 1997.
9. Surjushe Amar, VasaniResham, DG Saple. Aloe vera:A Short Review. Indian Dermatol 2008; 53(4): 163-6.
10. Evans Charles Williams. Trease and Evans Pharmacognosy. Delhi:Harcourt Publisher; 2002. p. 240-42.
11. Ambasta SP. Useful Plants of India. New Delhi: National Institute ofScience Communication; 2000. p. 30-31.
12. Gupta AK, TandonNeeraj. Indian Medicinal Plants. Vol.2. New Delhi:ICMR; 2004. p. 101-109.
13. Unani Pharmacopeia of India.Part-I, Vol. I. New Delhi: Department ofAYUSH; 2007. p. 82-83.
14. Nadkarni KM. Indian Plants and Drugs. New Delhi: Srishti BookDistributors; 2004. p. 28-29. PMID:15129907.
15. Alrashdan MS, Cirillo N, McCullough M (2016) Oral lichen planus: a literature review and update. Arch Dermatol Res 308(8):539–551.
16. Eisen D, Carrozzo M, Bagan Sebastian JV, Thongprasom K (2005) Number V Oral lichen planus: clinical features and management.
17. Dal’Belo SE, Gaspar LR, Maia Campos PM., Skin Res Technol. 2006; 12(4): 241-6
18. Su CK, Mehta V, Ravikumar L, Int. J Radiat. Oncol. Biol. Phys. 9-1-2004; 60(1): 171-177.
- 19.Syed TA, Cheema KM, Ahmad SA, Journal of the European Academy of Dermatology & Venerology 1996; 7(3): 294-295.
20. Morrow DM, Rappaport MJ, Strick RA. Archives of dermatology, 1980, 116:1064–1065

