

Aloe vera

Aloe vera, Aloe barbadensis, Aloe capensis

Felicity Goodyear-Smith MBChB, MGP, FRNZCGP; Professor, Department of General Practice and Primary Health Care, School of Population Health, The University of Auckland, Auckland, New Zealand

PREPARATION: Aloe vera is a succulent perennial plant that belongs to the lily family. It has been used topically for thousands of years. The product used is a gel—a clear, jelly-like substance that's scraped from the inner region of the leaf. Its main uses are as an emollient, but it may also be taken internally.

ACTIVE CONSTITUENTS: Aloe vera leaves contain a range of biologically active compounds, including acetylated mannans, polymannans, anthraquinone, C-glycosides, anthrones and anthraquinones and various lectins.

USES: Externally for skin conditions such as psoriasis, eczema, shingles, genital herpes, cuts, burns, and internally for digestive problems including ulcers and diverticulitis.

EVIDENCE FOR EFFECTIVENESS: There is some evidence that aloe vera cream performs better than placebo for chronic plaque psoriasis¹ and that pressure ulcers have improved healing where wounds are cleansed with saline spray containing aloe vera,² There is insufficient evidence that its use in dressings and topical agents improves healing of surgical wounds,³ or that disposable napkin linings impregnated with aloe vera extract prevents napkin dermatitis in infants.⁴

There is very weak evidence that aloe vera may be associated with a reduction in pain in oral lichen planus⁵ and with

Summary Message

Topical aloe vera may be effective in treating skin diseases such as psoriasis with little adverse effect apart from occasional rash. While there is weak evidence supporting its oral use in specific conditions, it may exacerbate a number of chronic conditions and has the potential for a number of drug interactions; hence its oral use is not recommended. As with any plant extract, caution is needed to ensure that a standardised pharmacological dose is being administered.

prevention of oral mucositis in patients receiving treatment for cancer.⁶

ADVERSE EFFECTS: Most likely safe if used topically. Minor redness and rash have been reported with topical use. Topical use of aloe is probably safe for children, pregnant and nursing women. Internal use of aloe may cause acute hepatitis, increase liver enzymes and alter potassium and blood glucose lab test results. US Food and Drug Administration warns against the use of aloe as a laxative. Internal use of aloe may interfere with nutrient absorption and particular caution is needed in patients who have diabetic, cardiac, renal, or gastrointestinal conditions. Oral use of aloe may cause electrolyte imbalance. Not recommended for prolonged use or for injection. Deaths have occurred after aloe was injected in humans, but oral use also is not recommended.

DRUG INTERACTIONS: Avoid topical use of aloe if using topical steroid medications. Do not use with azidothymidine (AZT) antiretroviral drug used

for treatment of HIV/AIDS. Internal use may interfere with loop diuretics, such as furosemide. Do not use with other laxatives, cardiac medications, oral corticosteroids, or hypoglycemic drugs. In New Zealand, CARM has received a report involving warfarin interactions with aloe vera (Prescriber Update Articles Watching Briefs—November 2007 Medsafe).

Key references

1. Mason AR, Mason J, Cork M, Dooley G, Edwards G. Topical treatments for chronic plaque psoriasis. Cochrane Database of Systematic Reviews. 2009(1).
2. Moore EHZ, Cowman S. Wound cleansing for pressure ulcers. Cochrane Database of Systematic Reviews. 2011(4).
3. Vermeulen H, Ubbink DT, Goossens A, de Vos R, Legemate DA, Westerbos JS. Dressings and topical agents for surgical wounds healing by secondary intention. Cochrane Database of Systematic Reviews. 2010(10).
4. Baer EL, Davies MW, Easterbrook K. Disposable nappies for preventing napkin dermatitis in infants. Cochrane Database of Systematic Reviews. 2009(1).
5. Thongprasom K, Carrozzo M, Furness S, Lodi G. Interventions for treating oral lichen planus. Cochrane Database of Systematic Reviews. 2011(7).
6. Worthington HV, Clarkson JE, Bryan G, et al. Interventions for preventing oral mucositis for patients with cancer receiving treatment. Cochrane Database of Systematic Reviews. 2011(4).

Herbal medicines are a popular health care choice, but few have been tested to contemporary standards. **POTION OR POISON?** summarises the evidence for the potential benefits and possible harms of well-known herbal medicines.