



Treatment for Psoriasis - A Herbal Approach

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ABSTRACT

Psoriasis is an inflammatory disease related to immune response. It is one of the chronic skin disease condition which has got no permanent cure. In spite of many treatment strategies, no strategy gives a fulfilled cure. Drugs prescribed for psoriasis shows varied side effects and thus world turns to natural way of medication. The objective of the present review is to explore the use of medicinal plants for the treatment of psoriasis and also the plants which has got beneficial effects on psoriasis.

Keywords: Psoriasis, Treatment, natural, herbal, medicinal.

INTRODUCTION

Psoriasis is an auto immune inflammatory disorder which leads to increased proliferation of skin cells. The skin becomes itchy and painful occurs in 1.5% to 3% of world population. In general the cells of the skin die and new cells are replaced but in case of psoriatic condition the cells grow at a faster rate and look like patches raised on the skin. It is one among the papulo squamous skin disease symptomised by papules or plaques with silvery scales.

The word psoriasis is derived from Greek word psora-meaning itch and skin action. The general therapies for this disease condition are topical applications like moisturizers, emollients, corticosteroids, Vitamin A & D and systemic therapy is given with corticosteroids, immunomodulators, etc. Advanced method includes phototherapy & photochemotherapy. There are seven types of psoriasis namely

- Plaque psoriasis
- Guttate psoriasis
- Inverse/flexural psoriasis
- Pustular psoriasis
- Erythrodermic psoriasis
- Hail psoriasis
- Psoriatic arthritis

The symptoms include irritation, dryness, redness, flaky patches of skin, genital sores, pain in joints, thickening & browning of nails and serve dandruff. The treatment for this disease conditions is generally advised for life long. Some times it is experienced that psoriasis is included even by certain factors like smoking, alcohol, BMI, infection, trauma etc. In certain cases it is found that psoriasis is induced by drugs like beta blockers, lithium, antimalarial drugs like chloroquine & hydrochloroquine, NSAIDS, antitriotics ACE inhibitors etc.

Drugs used in treatment of psoriasis include Roxelitinib, Tofacitinib, Briakinumab, Acitretin, Alefacept, Allantoin, Anthalin, Hydroxy urea, infliximab etc.

HERBS USED IN TREATMENT OF PSORIASIS

As it is always believed that herbs are safe and mostly devoid of side effects, in psoriasis also herbs play a vital role in the treatment because drugs provoke much of side effects. Herbs are used as extracts, fractions, isolates, formulations and were proven to possess anti psoriatic activity. This review gives a list of few herbs which possess or used in the treatment of psoriasis

Oregon grape

Oregon grape (*Mahonia aquifolium*) is also called barberry. Oregon grape has anti-inflammatory properties. The stem and leaves of the plant can be ground into the powder or distilled into an extract that is then used to make a topical skin cream. It's been found to reduce redness in psoriatic flares when used topically. In effective clinical studies, skin cream contained 10 percent Oregon grape extract. The cream can cause a burning sensation during application, but there are few other side effects to using Oregon rape on your skin. Oregon grape works best if your psoriasis is mild to moderate.

Indigo naturalis

Indigo naturalis is a plant used in traditional Chinese medicine. Its also been used to make indigo-colored dye for many centuries. *Indigo naturalis* can be distilled into an oil extract. This extract can treat nail psoriasis. In one study, using the oil on nail psoriasis every day for 24 weeks resulted in significant improvement. The herb extract can also be used topically on other parts of your body where you're having a psoriasis flare.

Aloe vera

Aloe vera is plant known for its soothing and cooling properties. *Aloe vera* may also help regenerate skin cells and heal irritated skin. Psoriasis can be treated with *Aloe*



vera using a cream containing at least 0.5 percent aloe. Applying the cream topically up to 3 times per day for 5 days in a row could decrease inflammation and help clear up a mild psoriasis flare.

Turmeric

Turmeric is part of the same family as the ginger plant. Its active ingredient is called curcumin. Turmeric has unique anti-inflammatory and antibacterial properties, which have led scientists to study it as a treatment for psoriasis. A gel that contained curcumin was used in a study of people with psoriasis. This treatment was mixed with topical steroids and a low-dairy diet. The people in the study reported a dramatic improvement in their psoriasis symptoms.

Capsaicin

Capsaicin is the active ingredient in chili peppers. It's the reason you feel a burning sensation when you eat food seasoned with chilies. The ability to create a "burning" of cells might actually help heal psoriasis flares. Moderate and severe psoriasis that was treated with topical capsaicin during a six-week study improved significantly. When you first start using capsaicin, you may experience an intense burning sensation at the site of application. But people in a successful psoriasis treatment study reported that the burning discomfort subsided when they kept using the capsaicin cream.

Dead Sea salts

The scales of the skin and itchiness gets reduced by use of the salt but it might induce high dryness so a moisturizer should be applied after using this as bath solution and the exposure should not be more than 15 minutes.

Fish oil

Oral administration of fish oil has proven to bring about cure to some extent and it is also co administered with Vitamin D supplement.

Cayenne

Peppers of Cayenne have been claimed to be used from long years ago. The major constituent called capsaicin plays a vital role in decreasing itching and lesions of the skin. This is reported to have major use in pain balms, gels and creams.

Garlic

Garlic oil can be applied on the skin to treat a multitude of skin ailments. For its high anti-inflammatory properties, it can also relieve itchy psoriasis outbreaks on your skin.

Jasmine flower paste

Jasmine (*Jasminum polyanthum*)

Jasmine flowers are used in the treatment of psoriasis. The paste made by crushing the flowers are applied on the affected parts of the skin directly which is found to

decrease the pain and the itchiness of psoriatic inflammations.

***Angelica sinensis* (dong guay)**

It is used as a medicine widely in China. It contains psoralen which is a potent furocoumarin. When UVA is present, these psoralen acts as a good photosensitizers. Rate of epidermal DNA synthesis decreases on exposure to UV A after taking psoralen knowing this certain patients did this and got relief.

***Matricaria recutita* (Chamomile)**

Traditionally used in many therapies on skin rejuvenation, stress relief etc. Also used in GI disorders. The active constituent Chamazulene, which is a by- product of matricin, a non-volatile oil extract has inhibiting affect over thereby forms leukotriene B4 (LTB4) which helps in treatment of psoriasis.

***Ulmus rubra* (slippery elm)**

It is traditionally proven to be used by Americans as a poultice in the treatment of boils and wounds. The effect is because of the high concentration of mucilage present in it. Scientists have proved that this plant shows improvement in patients with Psoriasis.

Alpinia galangal* and *Annona squamosa

Alpinia galanga, *Curcuma longa* and *Annona squamosa* has been reported to possess anti psoriatic activity by the regulation of NF-KB signals.

Thespesia populnea

Perry's mouse tail model was used to prove the anti psoriatic activity of this plant. There was nearly 25% increase in orthokeratosis.

Smilax china

The presence of quercetin in the rhizome was found to possess anti psoriatic activity. There was a decrease in thickness of the epidermis with decrease in migration of leucocyte.

***Nigella sativa* (black cumin)**

Tazarotene gel was used as a standard in a study to screen the anti psoriatic activity of *Nigella sativa* linn (Ranunculaceae) seeds which produced a massive difference in the epidermis. It was studied by performing mouse tail model and by *in-vitro* methods using cell lines.

Wrightia tinctoria

This plant possess excellent antioxidant properties which was screened by DPPH, nitric oxide and hydrogen peroxide scavenging assay which was further correlated to the anti psoriatic effects of this plant. The activity was proven by mouse tail test using iso retinoic acid as standard.



CONCLUSION

Although there are many plants claimed to possess antipsoriatic activity, the research work undergoes on these plants are very few compared to other activities, Thus research work has to be carried out to prove the antipsoriatic potential of the herbs and formulations has to be developed to reach the patients such that they get right medicine in a safe, cheap and effective manner.

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