



Review Article

A REVIEW ON HERBAL REMEDIES FOR SKIN DERMATITIS

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ABSTRACT:

Many medicinal plants are commonly used to treat skin diseases such as dermatitis, psoriasis, acne, hives, and ringworm. Herbal medicine is as old as civilization. Application of traditional herbal medicine is widespread in different regions of the world. It is more common in villages and desert areas where medicinal services are less accessible. Herbal treatments are generally proved as effective and have few side effects. Research on herbal drugs in terms of controlled clinical trials in humans is still limited. Herbal research ultimately opens new therapeutic availability. Dermatitis is a group of skin conditions that cause the skin to become inflamed or irritated. The treatment of Dermatitis is complicated. Moreover, screening is essential to reduce any potentially harmful side effects on human skin and health. Many ayurvedic herbal plants are used as anti-dermal which have been described in this review paper, such as marigold (*C. officinalis*), Licorice (*G. glabra*), Marshmallow (*A.officinalis*) and chamomile (*M. chamomilla*).

**KEY WORDS:** Medicinal herbs; treatment; skin diseases; dermatitis.

INTRODUCTION:

Many medicinal plant species worldwide are used in traditional medicine for treating different diseases. The world health organization (WHO) has estimated that about 80% of the population living in the developing countries depends tremendously on traditional medicine for their primary health needs. More than half of the world's population still depends exclusively on medicinal plants, and plants offer the active ingredients of most traditional medical products. Human skin is the largest organ in the body. It forms the first guard line. Its three main layers are epidermis, dermis and hypodermis (subcutaneous tissue). Each layer offers a distinctive role in the homeostasis of the skin. They vary in thickness throughout the

body and from person-to-person<sup>(1)</sup>.

Dermatitis is a general term that describes a skin irritation. Dermatitis is a common condition that has many causes and occurs in many forms. It usually involves itchy, dry skin or a rash on swollen, reddened skin. Or it may cause the skin to blister, ooze, crust or flake off. Examples of this condition are atopic dermatitis (eczema), dandruff and contact dermatitis<sup>(2)</sup>. Dermatitis is a fairly common disease that while not life-threatening, has the potential to be detrimental to a high-quality lifestyle. There are multiple types of dermatitis, including contact dermatitis, which is caused by contact with an allergen or irritant; neurodermatitis, which is formed by repeatedly scratching an itchy

portion of skin; and atopic dermatitis, which is common in people who have allergies such as hay fever or asthma<sup>(3)</sup>.

A variety of medicinal herbs has been used as herbal remedies for dermatitis. In general, when using herbal preparations as a treatment for dermatitis, caution should always come first, since herbs can interact with other herbs, medications or supplements. As a result, it is critical that herbal remedies should be used only by patients that have first consulted with a physician or other healthcare provider. Further to that, some herbal medications should never be used on skin with open sores or wounds, as an infection could result<sup>(4)</sup>.

Each type of dermatitis may look a little different and tends to occur on different parts of your body. Signs and symptoms of different types of dermatitis include:

- **Atopic dermatitis (eczema):** Usually beginning in infancy, this red, itchy rash usually occurs where the skin flexes - inside the elbows, behind the knees and in front of the neck. The rash may leak fluid when scratched and crust over. People with atopic dermatitis may experience improvement and then seasonal flare-ups<sup>(5)</sup>.



Fig 1: Atopic dermatitis

- **Contact dermatitis.** This red, itchy stinging rash occurs where your skin has come into contact with substances that irritate the skin or cause an allergic reaction. You may develop blisters<sup>(5)</sup>.



Fig 2: Contact dermatitis on the wrist

- **Seborrheic dermatitis.** This condition causes scaly patches, red skin and stubborn dandruff. It usually affects oily areas of the body, such as the face, upper chest and back. Seborrheic dermatitis can be a long-term condition with periods of improvement and then seasonal flare-ups. In infants, this condition is called cradle cap<sup>(6)</sup>.



Fig 3: Seborrheic dermatitis on the face

- **Follicular eczema.** With this type, the affected skin thickens and develops bumps in hair follicles. This condition is common in African Americans and in people with dark-brown skin<sup>(7)</sup>.

#### METHODOLOGY:

There are many medicinal plants used to treat dermatitis, however, we selected in this review common medicinal herbs, namely, marigold (*C. officinalis*), Licorice (*G. glabra*), Marshmallow (*A. officinalis*) and chamomile (*M. chamomilla*) used for the treatment of dermatitis. These plants were chosen for this study based on: first, previous literature reviews and second,

ethnobotanical information. In addition, it seems that these herbal plants are relatively more effective in treating dermatitis and have minimal side effects compared to most other plants. The current review was achieved using an organized search of the scientific data published on herbal medicinal plants used for the treatment of dermatitis<sup>(8)</sup>. The searches were carried out using various databases, including PubMed (<http://www.ncbi.nlm.nih.gov/pubmed>), Science Direct (<http://www.sciencedirect.com/>), Scopus (<http://www.scopus.com/>), and Google Scholar (<http://www.scholar.google.com/>).

Many related research works has been carried out in this direction using herbal medicine with encouraging results. It is an endeavour on the part of this review paper to highlight such documented herbs which show herbal remedies for dermatitis.

#### **Other medicinal herbs that may be useful as herbal remedies for dermatitis :**

- Black walnut – (*Juglansnigra*)
- Flaxseed Oil – (*Linumusitatissimum*)
- Gingko – (*Ginkgo Biloba*)
- Oregon Grape Root – (*Berberisaquifolium*)
- Slippery Elm – (*Ulmusrubra*)
- Uva-Ursi – (*ArctostaphylosUva-Ursi*)
- Borage Oil – (*Boragoofficinalis*)
- Evening Primrose Oil – (*Oenotherabiennis*)
- Grapeseed Extract – (*Vitisvinifera*)
- Patchouli – (*Pogostemoncablin*)
- Tea Tree Oil – (*Melaleucaalternifolia*)
- Daisy – (*Bellisperennis*)
- Henna – (*Lawsoniainermis*)
- Avocados – (*Perseaamericana*)

#### **DISCUSSION:**

In this review, we assembled information on common medicinal plants such as marigold (*C. officinalis*), Licorice (*G. glabra*), Marshmallow (*A.officinalis*) and chamomile (*M. chamomile*) used to treat dermatitis and addressed the question whether the treatment of dermatitis with these medicinal plants is efficient in humans. Though in vivo and in vitro investigations play a significant role in the evaluation of safety and efficacy of medicinal plants in preclinical trials, there is no perfect denouncement for their final success as human drugs. Thus, the efficiency of these plants requires to be further clarified. Many traditional medicines used in folk medicine are reported to have anti-dermal activity, however, only some have been investigated systematically in vitro or/and in vivo. Common herbal plants utilized in this review and their traditional uses for treating skin diseases as seen in Table No.1. Though several in vitro studies have demonstrated the anti-dermal activity of plant extracts and phytochemicals, there is insufficient evidence in humans. The clinical trials and their highlighted results are limited. In addition, many of these phytochemicals have not been tested for their cytotoxicity, acute toxicity, or/and long-term toxicity in normal cells and animals, which seriously limits in vivo investigations. The clinical effectiveness and safety should be examined simultaneously for herbal plant extracts and compounds. Though good progress has been lately accomplished, the impact of herbal plants on dermatitis requires to be explored in more detail.

**Table No. 1: Herbs with the Most Promising Supportive Information as Herbal Remedies for Dermatitis:**

Sr. No.	Scientific Name	Name	Part Used	Description	Picture
	<i>Matricaria recutita</i>	Chamomile	The entire above ground portion of the plant can be used.	Chamomile can be used to treat dermatitis as a poultice. Alternatively, it can be used as a commercially available cream, lotion or ointment <sup>(9)</sup> .	 fig:1
	<i>Stellaria media</i>	Chickweed	Aerial parts and root	It has been used as a Chinese folk medicine for over 200 years due to its effective anti-inflammatory properties. Modern herbalists mainly prescribe it for diseases of the skin, to include an herbal remedy for dermatitis <sup>(10)</sup> .	 fig:2
3	<i>Calendula officinalis</i> .	Marigold	Calendula flower petals are used fresh or dried.	Marigold is an ingredient in a variety of preparations used for soothing irritated skin, such as that found in cases of dermatitis. Marigold is generally available in most natural health food stores, commonly in both cream and ointment forms <sup>(11)</sup> .	 fig:3
4	<i>Glycyrrhiza glabra</i>	Licorice	The main tap-root and the rhizomes are used in medicinal and flavoring applications.	Licorice is likely the most commonly used herb in traditional Chinese medicine and it has been used for hundreds of years as an herbal remedy to treat skin disorders such as dermatitis <sup>(12)</sup> .	 fig:4
5	<i>Hamamelis virginiana</i>	Witch hazel	Bark, leaves, twigs, seed pods.	Witch hazel cream may be effective for itching, while witch hazel liquid can work for weeping or oozing dermatitis <sup>(13)</sup> .	 fig:5
6	<i>Althea officinalis</i>	Marshmallow	Flower and roots	when applied topically, the gel obtained when marshmallow is mixed with water can be soothing and protective to skin injuries <sup>(14)</sup> .	 fig:6
7	<i>Hypericum perforatum</i>	St. John's Wort	The flowers and the leaves are harvested and used for medicinal purposes.	It can be used as an herbal remedy for dermatitis in the form of a poultice.it showed anti-inflammatory and pain relieving properties <sup>(15)</sup> .	 fig:7

## CONCLUSION:

Dermatitis is a chronic inflammatory disorder of skin affecting a large percentage of people all over the world. Although wide ranges of drugs are available, the relief is mainly symptomatic and short lived. The available treatment options have major limitations owing to adverse effects. Herbs/plants are always an ideal source of drugs. In the ancient times, traditional drugs of plant origin were used for the treatment of various diseases. As from various experimental and clinical studies, a number of ayurvedic herbs have been reported that help in preventing Dermatitis infections without any side effects and gradually helps in recovering from skin problems. So, in this review paper, various such herbal remedies with significant anti-dermal activity are described.

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