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Review Article

Insights of Cardiovascular Pharmacology Research

Traditional medicinal plants and skin disease

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Abstract

Skin diseases are numerous and frequently occurring health problems affecting all ages from neonates to the elderly and cause harm in a number of ways. Maintaining healthy skin is important for a healthy body. Many people may develop skin diseases that affect the skin, including cancer, herpes and cellulitis. Some wild plants and their parts frequently used to treat these diseases. Using plants as old as a natural treatment is cheap and claimed to be safe. It is also suitable raw material for the production of new synthetic agents. A review of some plants for the treatment of skin diseases provided that summarizes the recent technological advancements that have taken place in the world during the past 20 years.

The skin interfaces with the environment; it plays a key role in protecting the body against pathogens and excessive water loss. Its other functions are insulation, temperature regulation, sensation, storage and synthesis of vitamin D by action of ultraviolet (UV) and the protection of vitamin B folates, absorption of oxygen and drugs and water resistance Severely damaged skin will try to heal by forming scar tissue.

Keywords: Main Difficulties; Future Operating Strategies

1. Introduction

Human skin, the body's outer covering, is the largest organ in the body. It also constitutes the first line of defense, the skin contains many specialized cells and structures, and it divided into three main layers viz. epidermis, dermis and hypodermis. Each layer provides a distinct role in the overall function of the skin. The Epidermis, the outermost layer of the skin, varies in thickness in different regions of the body; it is the thinnest on the eyelids (0.05 mm) and the thickest on the palms and soles (1.5 mm). The dermis also varies in thickness depending on the location of the skin. It is 0.3 mm on the eyelid and 3.0 mm on the back of the body, the dermis attached to an underlying hypodermis or subcutaneous connective tissue. The subcutaneous tissue is a layer of fat; connective tissue that houses larger blood vessels and nerves, this layer is important in the regulation of the temperature of the skin itself and the body, and the size of this layer varies throughout the body and from person to person. Hair follicles, sweat glands and sebaceous glands are the main skin appendages.

The skin guards the underlying muscles, bones, ligaments and internal organs, there are two general types of skin, hairy and glabrous skin. However, the skin could be dry, sensitive, pale, sagging, or tired. People deficient in essential nutrients such as beta-carotene, the B complex vitamins and vitamins C and E often suffer from skin drying.

1.1. Skin Problem

The skin problems contain numerous effects such as rashes, the rash is an area of red, inflamed skin or a group of individual spots, and these could be caused by irritation, allergy, infection, an underlying disease, as well as by structural defects for example, blocked pores or malfunctioning oil glands. Examples of rashes include acne, dermatitis, eczema, hives, pityriasis rosea, psoriasis, and viral infections; these occur when a virus penetrates the stratum corneum and infects the inner layers of the skin. Examples of viral skin infections include herpes simplex, shingles (herpes zoster) and warts. Some systemic viral infections, such as chicken pox and measles, may also affect the skin; viral infections cannot be cured with antibiotics and various bacteria, the most common types being staphylococci and streptococci, cause bacterial infections. Bacteria may infect the topmost layers of skin, the follicles, or the deeper layers of skin. If not treated correctly, these infections may spread throughout the body. Examples include impel folliculitis, cellulitis, and lyme disease, bacterial infections are better treated with antibiotics and fungal infections, and harmless fungi are always present on the surface of the skin. Infection occurs when these organisms enter the body.

These infections are usually superficial, affecting the skin, hair, nails and include athlete's foot, lock itch and ringworm. Parasitic infections, these infections occur after exposure to parasites

such as lice and scabies, Pigmentation disorders, the amount of pigment in the skin determined by the amount of melanin produced by the body. Loss of pigment (hypopigmentation) could cause by the absence of melanocytes, malfunctioning cells, exposure to cold or chemicals, or some types of infection. An increase in pigment (hyperpigmentation) may cause by skin irritation, hormonal changes, aging, a metabolic disorder, or any other underlying problem. Age spots, freckles and melasma are examples of hyperactive pigmentation. Vitiligo is an example of hypopigmentation and Tumors and cancers; these growths arise when skin cells begin to multiply faster than normal. Not every skin growth is cancerous. Some tumors harmless and will not spread. Skin cancer is the most common of all cancers. It caused, in 90% of cases, by sun exposure. The three types of skin cancers are basal cell cancer (the most curable), squamous cell cancer (which may grow and spread) and malignant melanoma (the deadliest form). Prevention involves protecting the skin against damaging ultraviolet rays; early detection helps to improve the chances of a cure. Regular self-examinations, therefore, recommended, the last problem is trauma. Trauma describes an injury to the skin caused by a blow, a cut, or a burn. Whenever the surface of the skin is broken, the body becomes more susceptible to infection and disease.

1.2. Herbal Drugs for Skin Diseases

due to a long history of use. Besides herbal medicines provide rational means for the treatment of many diseases that are obstinate and incurable in other systems of medicine. For these reasons, several plants investigated for treatment of skin diseases ranging from itching to skin cancer.

1.3. Achyranthes Aspera

The Common name of this plant is Prickly chaff flower, Devil's horsewhip and belongs to Family Amaranthaceae, traditionally; the plant used in boils, scabies and eruptions of skin and other skin diseases. The methanolic extract, alkaloid, non-alkaloid and saponin fractions obtained from the leaves of A. aspera exhibited significant inhibitory effects (concentration 100 µg) on the Epstein-Barr virus early antigen (EBV-EA) activation induced by the tumor promotor 12-O-tetradecanoylphorbol-13-acetate (TPA) in Raji cells. In this in invitor assay the non-alkaloid fraction containing mainly non-polar compounds showed the most significant inhibitory activity (96.9%; 60% viability)., but in the in vivo two-stage mouse skin carcinogenesis test the total methanolic extract possessed a pronounced ant carcinogenic effect (76%). The results revealed that leaf extract and the non-alkaloid fraction are valuable antitumor promotors in carcinogenesis. [1].

1.4. Allium Cepa

The common name is Onion and belongs to Family Liliacea. A study undertaken in patients with seborrheic keratoses to evaluate the ability of onion extract gel to improve the appearance of scars following excision, has shown that this extract gel improved scar softness, redness, texture and global appearance at the excision site at study weeks 4, 6 and 10 as assessed by the blinded investigator. In another study, studied the antifungal activity of aqueous extracts prepared from A. cepa (onion; AOE) and Allium sativum (garlic; AGE), and evaluated extracts against Malassezia furfur (25 strains), Candida albicans (18 strains) [2]. Other Candida sp. (12 strains) as well as 35 strains of various dermatophyte species and the results indicated that onion and garlic might be promising in treatment of fungal-associated diseases from important pathogenic genera like Candida, Malassezia and the dermatophytes [3].

1.5. Alluim Sativum

Common name is Garlic and its family Liliaceae, study conducted with on Swiss albino mice in whom cancer induced by 7, 12-dimethylbenz (a) anthracene (DMBA), they revealed that best chemo preventive action of garlic observed in mice in which garlic treatment performed before and after the induction of skin carcinogenesis [4]. He added that Garlic ingestion delayed formation of skin papillomas in animals and simultaneously decreased the size and number of papillomas, which also reflected in the skin histology of the treated mice. The protective effect against skin cancer elicited by garlic in mice believed to be due at least in part to the induction of cellular defense systems.

1.6. Aloe Vera

This plant has common name Barbados aloe, belongs to family Xanthorrhoeaceae, Aloe vera has shown very good results in skin diseases and it often taken as health drink, it also found effective in treating wrinkles, stretch marks and pigmentations. It also seems to be able to speed wound healing by improving blood circulation through the area and preventing cell death around a wound. One of the studies conducted on mice by to investigate the effects of Scutellariae radix and Aloe vera gel (AV) [5]. In spontaneous atopic dermatitis (AD)-like skin lesions, they revealed that the group receiving only AV in a dose of 0.8 mg/kg p.o provided relief in AD due to reduction of interleukin (IL)-5 and IL-10 levels.

The gel has properties that are harmful to certain types of bacteria and fungi. A cream containing 0.5% aloe for 4 weeks reduced the skin plaques associated with psoriasis. Cited that application of gel helped in the improvement of partial thickness burns, when applied to the skin, the gel seems to help skin survive frostbite injury [6]. Published that it might delay the appearance of skin damage during and after radiation treatment [7].

1.7. Azadirachta Indica

Common name neem, family: Meliaceae, leaf extract applied externally on boils and blisters. Cleared that skin tumors were induced in mice by topical application of DMBA (500 nmol/100 µl for 2 weeks) followed by TPA (1.7 nmol/100 µl of acetone, twice weekly) as a promoter [8]. The test group received aqueous Azadirachta indica leaf extract (AAILE) orally at a dose level of 300 mg/kg body weight three times a week for 20 weeks. The results of this study were in harmony of they revealed that the chemopreventive potential of A. indica against murine skin carcinogenesis [9].

Rasheed et al., in another study, conducted on an anti-acne moisturizer formulated from herbal crude extracts and investigated for the physico-chemical parameters as well as

antibacterial activity of the formulation, revealed that ethanol extract of Andrographis paniculata, Glycyrrhiza glabra, Ocimum sanctum, A. indica and green tea possessed the potential for inhibiting acne [10]. It observed that the optimal formula of anti-acne moisturizer was satisfactorily effective to control acne-inducing bacteria i.e., Staphylococcus epidermis and Propionibacterium.

1.8. Bauhinia Variegata

Common name is Kachanar, Mountain Ebony, family (Fabaceae), the bark is internally administered for treating skin diseases, asthma, sore throat, diarrhea and abdominal discomfort and also applied externally for skin ulcers. In the skin papilloma model, significant prevention, with delayed appearance and reduction in the cumulative number of papillomas observed in the DMBA + Kachanar + croton oil treated group as compared to the DMBA + [11]. Conducted croton oil group. They added that C57 Bl mice, which received a 50% methanolic extract of Kachanar extract at the doses of 500 and 1000 mg/kg body weight for 30 days, showed increase in life span and tumor size significantly reduced as compared to controls. In anti-mutagenic studies, a single application of Kachanar extract at doses of 300, 600 and 900 mg/kg dry weight, 24 h prior the i.p. administration of cyclophosphamide (at 50 mg/kg) significantly prevented micronucleus formation and chromosomal aberrations in bone marrow cells of mice, in a dose dependent manner.

1.9 Beta Vulgaris

Common name is Beetroot, belongs to family Brassicaceae, the in vitro inhibitory effect of beet root extract on EBV-EA induction using Raji cells revealed a high order of activity compared to capsanthin, cranberry, red onion skin and short and long red bell peppers. An in vivo anti-tumor promoting activity evaluation against the mice skin and lung bioassays also revealed a significant tumor inhibitory effect. The combined findings suggest that beetroot ingestion can be one of the useful means to prevent cancer [12].

Brassica oleraceae has a common name of Red Cabbage, family Brassicaceae. A significant reduction of tumors observed by who cited that in mice in whom skin cancer was induced by a single topical application of 200 nmol of the initiator DMBA to their backs [13]. A followed 1 week later by promotion with 10 nmol of TPA twice weekly for 30 weeks followed by 0.1 g/L of aqueous extract of B. oleraceae 1 week after administration of initiator.

1.10. Calendula Officinalis

This common name is Marigold and belongs to the family Asteraceae. Marigold flowers have long employed in folk therapy and more than 35 properties have attributed to decoctions and tinctures from the flowers. The main uses are as remedies for burns (including sunburns), bruises and cutaneous and internal inflammatory diseases of several origins. noticed that topical formulations containing marigold extract (ME), evaluated in hairless mice against UV-B irradiation-induced photodamage, revealed that application of ME in a gel formulation, containing 0.21 µg/cm of narcissin and as 0.07 µg/cm of the rutin in the viable epidermis, were associated with a possible improvement in the collagen synthesis in the subepidermal connective tissue [14].

Cleared that experiments were carried out in 34 patients with venous leg ulcers to determine the therapeutic efficacy of ME on the epithelialization of lower leg venous ulcers revealed a significant acceleration of wound healing by producing epithelialization [15]. Meanwhile studied cream preparations containing seven different types of marigold and rosemary extracts, and they revealed that such creams are effective in experimentally induced irritant contact dermatitis when tested on healthy human volunteers [16].

1.11. Camellia Sinensis

Arranged that the common name is green tea, Chaay, family Theaceae; green tea comes from the tea plant C [17]. sinensis and may play a beneficial role in the treatment of skin tumors and cancer. It contains polyphenols, which act as antioxidants in the body. A specific polyphenol in green tea called epigallocatechin gallate, according to the National Center for Complementary and Alternative Medicine, has been reported to prevent the onset of further growth of skin tumors in Common name is Beetroot, belongs to family Brassicaceae, the in vitro inhibitory the body and it can rejuvenate old skin cells to start reproducing again, keeping the skin younger looking.

1.12. Cannabis Sativa

Its common name Charas, Ganja and belongs to the family: of Cannabinaceae, the powder of the leaves serves as a dressing for wounds and sores. Ganja externally applied to relieve pain in itchy skin diseases. Hemp seed oil is useful for the treatment of eczema and a host of other skin diseases like dermatitis, seborrhoeic dermatitis/cradle cap, varicose eczema, psoriasis, lichen planus and acne rosacea. By using hemp seed oil, the skin strengthened and made better able to resist bacterial, viral and fungal infections. Crushed leaves rubbed on the affected areas to control scabie [7].

1.13. Crocus Sativa

The common name is Saffron, family: Iridaceae, saffron is a naturally derived plant product that acts as an antispasmodic, diaphoretic, carminative, emmenagogic and sedative. Studied the chemopreventive effect of aqueous saffron on chemically induced skin carcinogenesis using a histopathological approach, they found that its ingestion inhibited the formation of skin papillomas in animals and simultaneously reduced their size [18]. Saffron inhibited DMBA-induced skin carcinoma in mice when treated early. This may be due, at least in part, to the induction of cellular defense systems. Added that it has also been found useful in the treatment of psoriasis [19].

1.14. Curcuma Longa

Common name is Turmeric; Family: Zingiberaceae. A study conducted on male Swiss albino mice in whom skin cancer was induced by topical application of DMBA by revealed a significant reduction in the number of tumors per mouse in the group receiving 1% curcumin obtained from rhizomes of C.

longa [20].

1.15. Daucus Carota

The common name is Carrot belongs to the family: Apiaceae. In a study conducted to investigate the chemopreventive effects of oil extract of D. carota umbels on DMBA-induced skin cancer in mice for 20 weeks [21]. Revealed a significant reduction in tumor incidence following administration via intraperitonial (0.3 ml of 2% oil) and topical (0.2 ml of 5, 50 and 100% oil) but least with gavage (0.02 ml of 100% oil).

1.16. Echinacea Angustifolia, Echinacea Purpurea

The common name is purple coneflower, family Asteraceae, Echinacea has applied on skin problems such as skin boils, wounds, ulcers, burns, herpes, hemorrhoids and psoriasis. Forms of Echinacea include tablets, juice and tea, in a study conducted on patients to determine the effect of oral supplementation with a nutraceutical, containing methionine, Echinacea, zinc, probiotics and other antioxidant and immunostimulating compounds, on the response of cutaneous warts, and revealed a significant reduction of warts in such patients [17]. While found that the herbal extract of E. purpurea (Echinaforce), readily killed a standard laboratory strain of Propionibacterium acnes (the main cause of acne) and several clinical isolates [22]. In cell culture models of human bronchial epithelial cells and skin fibroblasts, P. acne induced the secretion of substantial amounts of several pro-inflammatory cytokines, including IL-6 and IL-8 (CXCL8), as determined by means of cytokine-antibody arrays. However, the E. purpurea completely reversed this effect and brought the cytokine levels back to normal. Added that thus Echinaforce could provide a safe two-fold benefit to acne individuals by inhibiting the proliferation of the organism and reversing the bacterial-induced inflammation [23].

1.17. Eucalyptus Globulus

It has many common names (Blue gum, Camphor oil) and belongs to the family Myrtaceae, in a study conducted on humans, it was revealed that human facial demodicosis when treated with freshly prepared camphor oil with or without glycerol dilutions gave complete cure with concentrations of 100%, 75% and 50% respectively [24]. Revealed that camphor oil with or without glycerol dilutions completely cured zoonotic scabies with concentrations of 100%, 75% and 50% within 5-10 days [25].

1.18. Euphorbia Walachii, Euphorbia Hirta, Euphorbia Tirucalli

The common name is wallich spurge, fam. Euphorbiaceae, juice of E. walachii used to treat warts and skin infections, a study, conducted on various species of Euphorbia, E. hirta, exhibited best antioxidant activity [26]. The plant extracts showed more activity against Gram-positive bacteria and fungi. The best antimicrobial activity shown by E. tirucalli. The study supported the folkloric use of E. hirta and E. tirucalli against some skin diseases caused by oxidative stress or by microorganisms.

1.19. Lavendula Officinalis

The common name Lavender, family: Labiata, studied the effects of lavender oil (1:500, 1:100, 1:10, 1:1, 1:0) on mast cell-mediated immediate-type allergic reactions in mice and rats and found that inhibit concentration-dependently the histamine release from the peritoneal mast cells [27]. It also inhibits immediate-type allergic reactions by inhibition of mast cell degranulation in vivo and in vitro when tested on mice and rats.

1.20. Lawsonia Inermis

Common name Henna, family: Lythraceae, henna is a traditionally used plant of the Middle East that applied on hands and feet. In the traditional system of medicine, leaf paste is applied twice daily on the affected parts to cure impetigo as cited by Kingston et al., [28]. In a study, clinical improvement in patients suffering from hand and foot disease cleared that to use of capecitabine, an anti-cancer drug, with use of henna revealed anti-inflammatory, antipyretic and analgesic effects of henna [29].

1.21. Lycopersicon Esculentum

The common name Tomato, family (Solanaceae). A study conducted by on healthy human volunteers using tomato paste (40 g), providing approximately 16 mg/d of lycopene, ingested with 10 g of olive oil over a period of 10 weeks has revealed that it is feasible to achieve protection against UV light-induced erythema by ingestion of a commonly consumed dietary source of lycopene [30].

Another study by conducted in healthy human volunteers using 55 g of tomato paste containing 16 mg of lycopene ingested with olive oil, also revealed that tomato paste containing lycopene provides protection against acute and potentially longer-term aspects of photo damage [31].

1.22. Mangifera Indica

Common name Mango, family: Anacardiaceae used the gum in dressings for cracked feet and for scabies. In addition, revealed that latex applied to cure ulcers [8]. Meanwhile applied aqueous extract of stem-bark (MIE, 50-800 mg/kg i.p.) produced a dose-dependent and significant ($P < 0.05$-0.001) anti-inflammatory effect against fresh egg albumin-induced paw edema in rats [32].

1.23. Matricaria Chamomile, Matricaria Recutita or Chamomilla Recutita

Common name is Chamomile, belongs to the family (Asteraceae), it aids in skin cell regeneration and acts as an antioxidant, fighting free radical damage on the skin. Renu, found that reel radicals are a dangerous oxygen by-product of cellular metabolism [17]. He added that there have been allergies reported and those with daisy allergies may find themselves allergic to chamomile. A controlled study of 161 individuals found chamomile cream equally effective as 0.25% hydrocortisone cream for the treatment of eczema, in a double-blind study, noticed that chamomile cream proved less effective for reducing inflammation of the skin than hydrocortisone cream or witch hazel cream [33]. But cleared finally, in a single-blind trial, 50 women receiving radiation therapy for breast cancer treated with either chamomile or placebo [34]. dded that Chamomile failed to prove superior to a placebo for preventing skin inflammation caused by radiation therapy [35].

1.24. Mirabilis Jalapa

The common name, four o'clock flower, Marvel of Peru and, belonging to the family Nctaginaceae, M. jalapa is used traditionally in allergic skin disorders and asthma. Illustrated in the study, employing ethanol: acetone (1:1) extract of the roots of M. jalapa, revealed that the extract (0.5 mL of 100 mg mL [-1]) inhibited histamine-induced guinea pig tracheal chain contractions non-competitively [35]. The extract (100 or 200 mg kg [-1] i.p.) inhibited milk-induced eosinophilia, and albumin-induced paw edema and protected mast cells against clonidine-induced granulation justifying the folkloric use of M. jalapa in the treatment of allergic diseases and asthma.

1.25. Momordica Charantia

The common name is Bitter gourd, belongs to the family Cucurbitacea. Singh et al., detected that tropical application of the fruit extract of (100 µl/animal/day) during the peri-initiation stage (1 week before and 2 weeks after initiation), [36]. DMBA and/or during the tumor promotion stage reduced the (i) tumor burden to 4.26, 3.72 and 3.11 (positive control value: 5.42). (ii) cumulative number of papillomas to 81, 67 and 53 (positive control value: 103); and (iii) percent incidence of mice bearing papillomas to 100, 94 and 94, respectively (positive control value: 100). In a comparison of the anticarcinogenic efficacy of Momordica peel, pulp, seed, and whole fruit. Extract (100 µl/animal/day), after topical treatment during the peri-initiation and during the tumor promotion stage, revealed the modulation of the (i) tumor burden (tumors/mouse) to 3.06, 3.61, 3.17 and 3.11; (ii) a cumulative number of papillomas to 49, 65, 54 and 53; and (iii) percent incidence of mice bearing papillomas to 84, 100, 94 and 94, respectively.

1.26. Plumbago Zeylanica

The common name, Doctor Bush, family, Plumbaginaceae, clarified that the whole plant is crushed with a pinch of salt and the paste is applied externally in case of ringworm through a study was conducted on plumbagin (5-hydroxy-2-methyl-1,4-napthoquinone), [8]. (Sand et al., 2012) indicated that a medicinal plant-derived naphthoquinone, isolated from the roots of the P. zeylanica revealed that topical application of plumbagin in mice inhibited UV induced development of squamous cell carcinomas [37].

1.27. Portulaca Oleraceae

The common name is Purslane, Pigweed, and Little Hogweed, belonging to family Portulacaceae, the herb possesses natural cooling properties that soothe the skin, relieving it of skin inflammations and rashes during scorching heat. Found that burns and skin eruptions as if boils and carbuncles could treat with an effective concoction of the leaves [38]. Topical application of the aqueous extract on to the skin is effective as antibacterial and antifungal, they added that externally, it was used to treat burns, earache, insect stings, inflammations, skin sores, ulcers, pruritis (itching skin), eczema and abscesses that are usually treated with the fresh herb as a poultice or the expressed juice is used. In Ghana, the leaves are ground, mixed with oil, and tied on boils. Noticed that sometimes in combination the leaves when eaten with tiger nuts (Cyperus esculentus) as a remedy for skin diseases and changes added that extract of this plant also found to be effective in the treatment of AD using hairless mice [39, 40].

1.28. Prunus Persica

Common name Peach, family, Rosaceae. Cleared that ethanolic extract of the flowers (Ku-35) (50-200 µg/ml) found to inhibit UVB and UVC-induced deoxyribonucleic acid (DNA) damage by the COMET assay in the skin fibroblast cell (NIH/3T3), [41]. In addition, Ku-35 inhibited UVB-or UVC-induced lipid peroxidation, especially against UVB-induced peroxidation at higher than 10 µg/ml.

1.29. Rosmarinus Officinalis

The common name is Rosemary, belongs to the family Labiatae, Rosemary is a common household plant grown in many parts of the world. It used for flavoring food, a beverage drink, as well as in cosmetics. The most important constituents of rosemary are caffeic acid and its derivatives such as rosmarinic acid. noticed that these compounds have an antioxidant effect, and chronic UV exposure is responsible for long-term clinical manifestations such as photoaging and photo-cancers, they added that an aqueous extract of R. officinalis has been reported to be effective in preventing cutaneous phphotodamagenduced by UV radiations [42]. Another study referred that the antibacterial activity of rosemary essential oil against P. acne observed with atomic force microscopy (AFM), and significant changes in morphology and size of P. acnes observed by AFM in response to essential oil treatment. Illustrated that Rosemary oil has also been seen to be effective against P. acnes, a bacterium causing acne. Found that application of methanol extract from leaves of rosemary to mouse skin inhibited the covalent binding of benzo (a) pyrene [B (a) P] to epidermal DNA and inhibited tumor initiation by B (a) P and DMBA [43, 44].

1.30. Sarco Asoca

Common name is Ashoka belongs to the family, Caesalpinaceae; found that the paste of the roots was useful in freckles and external inflammations, ulcers and skin diseases [45]. It used for itching in eczema, psoriasis, dermatitis and herpes-kushta/ visarpa by rubbing the crushed flower on the skin and it is a favorite herb to relieve pruritis, scabies and tinea pedis. 50 g of the dried flowers of S. asoca and the leaves of L. inermis boiled in coconut oil and the extract externally applied twice a day to treat ecThe commonzema and scabies. The study revealed that pretreatment with the flavonoid fraction of S. asoca caused a significant reduction in the number of tumors per mouse and the percentage of tumor-bearing mice. Furthermore, the latency period for the appearance of the first tumor delayed by S. asoca pretreatment. A significant reduction in the expression of ornithine decarboxylase, a key enzyme in the promotion stage of 2-stage skin cancer, in the plant-treated group also observed suggesting the chemo preventive activity of flavonoids from S. asoca on 2-stage skin carcinogenesis.

1.31. Thyme Vulgaris

Common name Thyme, family, Lamiaceae, indicated that it may relieve the symptoms of cellulitis, an infection of the skin

caused by bacteria which can lead to pain, tenderness, edema, fever, chills and reddening of the skin [17]. It may also offer anti-fungal and antibacterial benefits. However, the University of Maryland Medical Center cautions that thyme has not been proven to specifically benefit cellulitis. In addition, this herb may raise the risk of bleeding [46, 49].

2. Conclusion

Herbals have great potential to cure different kinds of skin diseases. More than 70% of people in the world depend on traditional health care and use different plant-based products for curing skin related problems. Compared with the conventional allopathic drugs, they have relatively low cost and can be of great benefit to the population of India in general and poor people in particular. Herbals are a rich source of active ingredients and can be safer and cost-effective treatment for skin diseases ranging from rashes to dreadful skin cancer. There are many plant species useful for treatment of skin diseases appear to be restricted to forests, so activities such as deforestation, habitat destruction, urbanization etc., may pose a serious threat to these species. Conservation of these plants with the help of local participation and carrying out of extensive research in this respect to broaden the prospects of herbal drugs in skin disease treatment is the need of the present time.

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