



# **Case Study**

# A CASE STUDY ON THE MANAGEMENT OF PSORIASIS (KITIBHA) BY AYURVEDIC INTERVENTION

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### **ABSTRACT**

Psoriasis (Kitibha) is one of the most common chronic skin disorders, which has psychological and social impact on patient's life. This disease is not contagious and may affect people of any age, but it commonly begins around 15 to 40 years. Psoriasis is commonly red and white hues of scaly patches appearing on the top of skin. This disease is equated to Kitibha in Ayurveda due to its invariable similarities in signs and symptoms. This case study aims to investigate whether Ayurvedic intervention can manage moderate to severe Psoriasis (Kitibha). A 41-year old male came to the Outpatient Department (OPD) of Central Ayurveda Research Institute, Guwahati with clinical features indicative of Psoriasis. This case was diagnosed as Kitibha and was managed by Ayurvedic interventions of Kaishore Guggulu 1gm twice a day, Arogyavardhini vati 500mg twice a day, Panchtiktaguggulu Ghrit 3 gm twice a day and Brihat Marichyadi tail local application twice a day for 3 months at OPD level. The response to the treatment was found to be highly effective. At the end of the treatment period and follow up of 1 month as compared with baseline, highly significant changes were observed. Kaishore Guggulu, Arogyavardhini vati, Panchtiktaguggulu Ghrit and Brihat marichyadi tail in the above-mentioned doses were found to be very effective and safe in moderate to severe case of Psoriasis (Kitibha).

## INTRODUCTION

Psoriasis is a hyper proliferative, autoimmune skin disorder which can be itchy and painful. The exact cause of this disease is still under research. In this disease, transformation of epidermal cells from basal cell layer to outer surface of skin is drastically reduced from normal one month to mere 3-5 days, which results in formation of immature epidermal cell. Those cells shed soon in the form of silvery scales (immature nucleated epidermal cells which are present in stratum corneum). It is induced and sustained by lymphocytes with secondary proliferation of keratinocytes. T-cell mediated immune response leads to accelerated growth of epidermal and vascular cells.[1]

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Psoriasis is characterized by well-defined erythematous sharply demarcated papules and rounded plagues covered by silvery micaceous scales variably pruritic and typical extensor distribution. Psoriasis is estimated to affect 2-4% of the population of the western world. The rate of psoriasis varies according to age, region and ethnicity; a combination of environmental and genetic factors is thought to be responsible for these differences.[2] It can occur at any age, although it most commonly appears for the first time between the ages of 15 and 25 years. Approximately one third of people with psoriasis report being diagnosed before age 20.[3] Psoriasis affects both sex equally.[4] In India the prevalence of psoriasis varies from 0.44 to 2.8%, it is twice more common in males compared to females, and most of the patients are in their third or fourth decade at the time of presentation.[5]

In Ayurveda, skin diseases are described under Kushthroga which is classified into two groups-Mahakushtha and Kshudrakushtha. Kitibha is included under Kshudrakushtha group. Causative factors of

Kitibha and other skin diseases are Apathya aharavihara, Viruddhaanna and Papakarma. Apathya-ahara (incompatible food habits) i.e., heavy food, nonvegetarian food, excess use of milk, curd and milk products, sour and acidic food, alcohol, Viruddha ahara like milk with fish, milk with sour fruits etc. exposure to direct light, arresting physical urges, excess indulge in sex etc., and living with mental worries vitiates Doshas and Dhatus. [6] The above mentioned etiological factors also loosen the four Dhatus viz., Twak (skin or Rasdhatu), Rakta (blood), Mamsa (flesh), Lasika (lymph). The aggravated Doshas localized in these Dhatus vitiate the later due to their looseness and produces Kushtha or skin disease. The skin disease with secretion, circulation in shape with excessive itching sensation, unctuous and black in color is described as *Kitibha*.<sup>[7]</sup> The skin disease, which is ash in color, rough surface like ulcer is calling Kitibha.[8] The skin disease that is dry, the ulcerated area is excessive rough in touch, hard, itching present and black in color is call *Kitibha*.<sup>[9]</sup> *Kitibha is* characterised by *Shvavam* (Blackish brown discoloration), Khinakharasparsha (roughness) and Parusha (hardness) and the Doshas involved in Kitibhakushta are Vata and Kapha.[10]

Modern medicine treats psoriasis with various medicaments like topical treatment such as application of corticosteroids, Keratolytics, Anthralin and Tars, Tazoterene analogues of Vit-D3. Systemic treatment consists of Cyclosporine, Retinoids, Methotraxate. Photo Therapy consists of UVB, PUVA, Bath PUVA and PDT. Despite their efficacy, these treatments have serious adverse effects like hepato-toxicity, pulmonary toxicity, pancytopenia, teratogenicity, metabolic disturbances and increased risk of malignancies.<sup>[10]</sup>

Shodhana and Shamana chikitsa is mentioned in Ayurveda for the management of Kushta. Shodhana chikitsa is based on Panchkarma therapy where shaman is included with oral medication and local application. Kaishore Guggulu is an herbal remedy containing purified Guggulu and is used as antiallergic, antibacterial and for blood purifier. It acts as health promoter for aging skin, acts as natural blood cleanser, is useful as supportive herbal supplement in many health conditions, such as diabetes and skin diseases.<sup>[11]</sup>

Arogyavardhini vati is Rasakalpa<sup>[12]</sup>. It cures skin diseases due to its purifying property. It removes dangerous toxins from body which is very effective for glorious skin. Shuddha Parad increases the immunity of person. Shuddha Gandhaka is very useful in various skin diseases. Shuddha Shilajatu has antioxidant property; Amalaki has antioxidant and astringent property which is very useful for healthy skin. Nimba patra is also one of the best drugs which cure all types of skin diseases. Abhraka Bhasma is useful in treating various skin diseases and liver diseases.

Panchatiktaguggulu ghrita<sup>[13]</sup> contents are having *Tikta rasa, Laghu & Ruksh guna,* so it acts as anti-itching property, *Kled & Vikrut meda upashoshan, Vranashodhak.* It mainly acts on body wastes (*Kled*), fat (*Meda*), plasma (*Lasika*), blood (*Rakta*), *Pitta, Swed* (sweat) & *Shleshma*<sup>[15]</sup>. *Brihat Marichyadi taila* has antiseptic and anti-fungal properties.

Kaishore guggulu, Arogyavardhini vati and Panchtikta guggulu Ghrita orally and Brihatmarichadya  $Taila^{[14]}$  local application are described for the treatment of Kushtha and other skin disorders.

## **Case Report**

A 41-year old man visited the outpatient department of Central Ayurveda Research Institute (CARI), Barsojai, Beltola, Guwahati on April 13, 2021, vide registration no. 394, with complaints of itching, dryness, roughness, circular erythema, exfoliation, pin point bleeding after removal of skin [Figures 1&2]. The above sign and symptoms have been spreading in the body since 4-5 years. All signs and symptoms were correlating to Psoriasis. He had consulted many modern medicine doctors for the treatment but satisfactory relief was not found. Pathology and biochemistry investigations have already done as per advice of doctors which was normal value.

After confirmation of psoriasis without any other diseases, Ayurvedic treatment consisting of Kaishore Guggulu 1gm twice a day before meal with water, Arogyavardhini vati 500mg twice a day after meal with water, Panchtiktaguggulu ghrit 10gm twice a day before meal with lukewarm water and Brihat Marichyadi tail for local application twice a day was prescribed for 2 weeks. The treatment intervention was selected on the basis of clinical presentation of the Kitibha (psoriasis) condition and therapeutic properties of the drugs with possible ability to modify the same. All Avurvedic medicines were supplied by Indian Medicines Pharmaceutical Corporation Ltd, Mohan, District Almora, Uttarakhand, to CARI, Guwahati. The patient showed mild improvement in the 15 days of above Ayurvedic treatment, therefore, the same medicines were continued every 15 days and clinical improvements were observed [Fig.3,4,5].

# **RESULT**

Initially, the patient was taking some modern medicine as and when there was unbearable itching. The response of the Ayurvedic treatment was found highly significant. At the end of the treatment period of 3 months as compared to baseline, there was marked reduction in itching, dryness, roughness, circular erythema, exfoliations. The patient returned to his routine work, and there was no discomfort after treatment. All sign and symptoms disappeared in hands and other parts of body but only discoloration is still continuing in the legs [Figures 6 & 7]. There was no recurrence of sign and symptoms in the follow-up

period of 1 month. Neither side effects nor complications were reported during the treatment and

follow-up period.





Fig. 1 &2: Before Treatment



Fig. 3: After 1 month treatment





Fig. 4 & 5: After 2 months of treatment





Fig. 6 & 7: After 3 months of treatment

## DISCUSSION

In the modern era, treatment of Psoriasis includes creams and ointments (topical therapy), light therapy (phototherapy), and oral or injected medication. The treatment options of the various types of psoriasis, however, differ due to different types of conditions. In Ayurveda, psoriasis can be considered as *Kitibha* under *Kustha* which are further divided into *Mahakustha* and *Ksudra Kustha*. Kitibha kustha is one type of Kshudra kustha and is usually characterized by *Shyava, Khara sparsha* and *Parusha*. Sushruta further added the symptoms as *Sravi, Vritta, Ugra kandu* and *Snigdha Krishna*. It manifests due to vitiation of *Sapta dhatus*; three *Dosha, Twak, Rakta, Mamsa* and *Lasika*; having involvement of *Vata* and *Kapha*.

Kaishore Guggulu balances Pitta and Kapha, particularly when it affects musculoskeletal system. Its main ingredients- Guduchi, Triphala and Trikatu-when combined with Guggulu, create a detoxifying and rejuvenating combination aimed primarily at removing deep-seated Pitta from the tissues. In Dhatu Kshava (degenerative) condition at affected part, it also acts to nourish and strengthen the system, supporting the overall health and proper function of the joints, the muscles and the connective tissue[15]. Guggulu exudate is obtained in the form of oleo gum resin from the stem of the plant Commiphora mukul (Hook. ex.). The pharmacological properties of Guggulu in Ayurveda are Tikta (bitter) in Rasa, Laghu (light) in Guna (property), Ushna (hot) in Virya (potency) and Katu (pungent) in Vipaka. Pharmacological action of Guggulu as described in Ayurveda is Brimhana (corpulent), Kaphavatahara (reduces Kapha and Vata), Pittala (increases *Pitta*), Vrishya (aphrodisiac),

Lekhana (reduce fat), Deepana (increases gastric enzyme) and Balya (provides strength). Therapeutic indications of Guggulu are multiple according to different Ayurvedic classical textbooks such as Sthaulya (obesity), Vata Vyadhi (diseases of nervous system), Amavata (rheumatoid arthritis), Vidradhi Roga (abdominal (abscess), *Udara* disorders). Vatarakta (gouty arthritis), Shopha (edema), Puti Karna (otitis media) and Vrana (ulcer). An active compound, 5 (1-methyl, 1-aminoethyl)- 5-methyl-2octanone, Guggulu gum also showed significant antibacterial activity against gram-positive bacteria and moderate activity against gram-negative bacteria.[16,17]

Arogyavardhini vati (R.R.S 20/87-93) is a useful formulation in treating skin diseases like eczema, excessive dryness of skin, rashes etc. It is indicated in various skin diseases due to vitiated Vata and Kapha. Ekakushtha is disease of Vata-kapha dushti, so it is useful in Ekkushtha (psoriasis), also use as Grahani shodhak, Dipan, Pachan, Pakwashaydushti nashak.

Probable mode of action of *Panchatikta* guggulu ghrita can be said as all contents are having *Tikta rasa, Laghu & Ruksh guna*, so it acts as antitching property, *Kled & Vikrut meda upashoshan, Vranashodhak*<sup>[18]</sup>. It mainly acts on body wastes (*Kled*), fat (*Meda*), plasma (*Lasika*), blood (*Rakta*), *Pitta, Swed* (sweat) & *Shleshma*<sup>[19]</sup>. *Nimb* has chemical composition of Nimbin, Nimbidin possesses significant dose dependant anti-inflammatory activity and significant anti-ulcer effect. *Guduchi* having Berberin & tinosporin mainly acts as anti-oxidant and immune-potentiating

thus cell layers during disease pathology are improved by this drug. Vasa the Vascicinone has anti-histaminic property as well as it is anti-oxidant and antiinflammatory. Patol has anti-oxidant & Nidiadhika has anti-histaminic property. Guggulu has excellent property to act on Vikrut kleda (abnormal body wastes) & Meda (fat), Mamsa dhatu (flesh) as it has Katu, Tikta, Kashay, Madhur rasa, Ushna veerya and *Katu Vipak*<sup>[20]</sup>. *Guagulu* stimulates body activity to build up immune system. Ghrita has lipophilic action so helps in ion transportation to a target organ. This lipophilic nature of Ghrita facilitates entry of drug in to cell and it's delivery to mitochondria, microsome and nuclear membrane. Also it helps in restoring the normal texture to skin<sup>[21]</sup>. So all these properties act at cellular level mainly of skin keratinization of cell layer thus improving cell cycle as a result symptoms like itching, deranged complexion, unctuous, perspiration, white or red patches are reduced giving normal texture to skin.

Abhyanga is the widely practiced measure to treat various disorders related to skin and hair. Massage in specific direction improves circulation, facilitates removal of toxins from the tissues and recuperates the body tissues.[22] According to Acharya Charaka<sup>[23]</sup>, it prevents wear and tear viz., it prevents degenerative changes of the body. Brihat Marichyadi taila has antiseptic and antifungal properties. So probable mode of action can be proper moisture balance (Kapha in balance), effective functioning of the metabolic mechanisms that coordinate all the various chemical and hormonal reactions of the skin (Pitta in balance) and efficient circulation of blood and nutrients to different layers of the skin (Vata in balance). It also depends on the health of three *Dhatus* (Body tissues) viz. nutritional fluid (Rasa), blood (Rakta) and muscle (Mamsa). Rasa supports all the *Dhatus* and keeps the skin healthy. Rakta, in association with liver function, helps detoxify the skin of toxins, while *Mamsa* provides firmness to the skin.[24]

## **CONCLUSION**

Ayurvedic management consisting of Kaishor guggulu, Arogyavardhini vati, Panchtiktaguggulu Ghrita orally and Brihatmarichyadya Taila locally was found very effective and safe in Psoriasis (Kitibha). The observed benefits may be attributed due to antiallergic, anti-bacterial and blood-purifying properties, skin health promoter of Kaishore Guggulu, purifying property of Arogyavardhini vati, anti-itching, Kled and vikrut meda upashoshan, Vranashodhak of Panchtikta guggulu Ghrita, antiseptic and antifungal properties of Brihatmarichyadya Taila. The findings of this case report suggest that with above Ayurvedic intervention psoriasis (Kitibha) may be managed successfully. The

findings need to be confirmed and validated in more of a number of patients of Psoriasis (*Kitibha*).

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