

ANTI-PSORIATIC EFFECT OF *WRIGHTIA TINCTORIA* (*SHWETA KUTAJA*): A REVIEW STUDY

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ABSTRACT

Psoriasis is a chronic inflammatory, hyper proliferative skin disease, characterized by well-defined erythematous skin plaques, particularly affecting extensor surfaces and scalp and usually follows a relapsing and remitting course.

Psoriasis can be corrected with *kitabha kushtha* in Ayurveda. It has become a global problem inspite of advances in modern science. Ancient science of Ayurveda has discussed psoriasis in length thousands of years ago. The incidence of psoriasis among total skin patients ranged between 0.44 and 2.2%, with overall incidence of 1.02%. Number of psoriasis patients are increasing in very high range. Year by year, its growing spread is very fast.

In Ayurveda, there are many ways to prevent psoriasis and to cure its complications. *Wrightia tinctoria* extracts possess superior antipsoriatic activity than betamethasone and retiny acetate (vitamin A topical formulation). In this paper, we are trying to explain the anti-psoriatic effect of *shweta kutaja* (*Wrightia tinctoria*).

Keywords: Psoriasis, *Kushtha*, *Kutaja*, *kitabha kushtha*, *Wrightia tinctoria*

INTRODUCTION: Psoriasis is considered as one of the leading skin disorder in the world. It is a chronic inflammatory, hyper proliferative skin disease, due to a combination of many genetic and environmental factors, resulting in erythematous scaly plaques over skin. Being a major skin degenerative disease, it is found in all parts of the world which affects approximately 1.5-3% of Caucasians and is less common in Asian, South American and African populations¹. Ayurvedic remedies for *kushtha* (psoriasis) are the oldest among all the available therapies. 'Kushthas' are a list of skin disorders especially characterized by dry and scaly skin with several abnormal qualities due to doshic imbalance. *Kushtha* is derived from *Kush* means dry and dreadful. So *kushtha* is a deformity in the body organs or which rot away the skin

(*kutsitey tishti kinva kushnati angam, angaani va*)². The main causes of *kushtha* are improper food habits, consuming food and drinks which are cold, unctuous, sweet and further doing heavy exercise and travelling in sun and air etc.³

CLASSIFICATION:

- I. According to doshic causes, these are classified as seven *kushthas-vataja, pittaja, kaphaja, vata-pittaja, pitta-kaphaj, kapha-pittaja, sannipataj*.
- II. These are further classified according to the main *doshik* character into *mahakushtha* (seven in no.) and *shudrakushtha* (11 in no.).⁴
- III. *Acharya Sushruta* has mentioned *krimija kushtha* also in its text. Medicinal plants and its products continue to be an important therapeutic aid for alleviating the ailments of human kind. Herbs for skin diseases are not new. Since

ancient times, plants and their extracts were used to combat psoriasis. Being a gruesome disease, it is attacking more the young generation due to increasing stress. Two things are common these days- individualization management and side effects of steroids who are using modern medicines for its treatment. It leads to searching of alternative system of medicine where Ayurveda has greater application and importance. Ayurveda treats psoriasis through drugs, diets, *panchkarma*. Many drugs and herbs are used in psoriasis. As this way, *shweta kutaja* (*Wrightia tinctoria*) is very useful. Psoriasis has many late complications like arthritis, comorbidities like cardiovascular disease, insulin resistance and even risk of HIV infection. *Kutaja* has significant anti-psoriatic, anti-fungal, anti-bacterial activity so that it can be used as an adjuvant along with allopathic treatment of medicine to treat psoriasis as well as to delay the late complications.

Profile of *Wrightia Tinctoria*

Botanical Name: *Wrightia tinctoria*⁵

Family: Apocynaceae

Psoriasis is not just a skin deformity- it is mainly a problem related to the sluggish body metabolism (especially the inefficient digestive system). Hence, just taking care of the external skin patches is not enough. Five pillars should be kept in mind for holistic healing of psoriasis-

- Restricted diet
- Positive healthy lifestyle
- Stress management
- Use of dietary supplements and herbs
- Herbal topical oils, shampoos and cream

MORPHOLOGY: It is a small to medium sized deciduous shrub or tree, ranging from 3m-15m in height.

BARK- The bark is smooth, yellowish brown and produce a white milky latex.

LEAVES- Simple, oppositely arranged, 10-20 cm long, 5 cm wide, glabrous, leaf stalks are very short.

FLOWERS- 5 white petals, 2-3 cm long which turn creamish yellow as they age, oblong petals

Chemical Composition: *Wrightia* (triterpenoid chemical), cycloartenone, cycloeucalenol, beta-amyrin, beta-sitosterol, conessin, flavonoids and saponins.

Anti-Psoriatic Activity: *Wrightia tinctoria* extracts possess superior antipsoriatic activity than betamethasone and retinyl acetate (vitamin A topical formulation). Its extract stimulates the production of collagen in human skin to relieve psoriasis symptoms. Collagen plays a vital role in providing strength, structure and durability to the skin. It maintains the skin elasticity and tightness- helps in restoration and replacement of dead skin cells also.

Anti-Inflammatory Effect: The phytochemicals (flavonoids, saponins and beta-sitosterol) illustrate potent anti-inflammatory properties. Flavonoids slow down the production of helper T-cells which in turn slow down the release of inflammation inducing chemicals (cytokines) to relieve skin inflammation.

Blood Purifier⁶: It is mentioned in *Charak chikitsasthan* (7/56) that when there is numbness, anesthetic skin and there is absence of sweating and itching over the affected area, then that area should be rubbed with brush made of *kutaja* so as to initiate bleeding which will help in flowing of toxicated blood.

Best Aamhar Drug:⁷ As the digestive system is sluggish in psoriasis, *kutaja* has a property of best *aamhara* action i.e. the

indigested food material is digested and assimilated otherwise *aama* in stomach can lead to many diseases. It has a great property of anti-diarrheal action and it is the best anti-fungal and anti-bacterial medicine. As mentioned in *Bhavprakash*, it is used in treating piles, diarrhoea, cholera and even *krimi roga*, thus will help in improving the digestive system.

If applied with coconut oil, gives best results. There are many classical as well as modern Ayurveda medicines containing extract of this medicinal tree are used to manage psoriasis.

Side Effects:⁹ If externally applied, it has no side effects. However, the patients of psoriasis had already taken so many steroidal medicines to cure it so early symptoms which can patient complains of is mild skin irritation but if used for prolonged period of time, these symptoms will gradually fade away.

In Ayurveda: Hindi name- *Karayaja*, *Kuda*, *Dudhi*, *Indrajau*

English name- Ivory wood, Sweet *Indrajao*, *Kurchi*

Sanskrit Synonyms: *Girimallika*, *Vatsaka*, *Vrikshaka*, *Kaalinga*, *Indravriskha*

In Samhita: *Kutaja* as *aamhara* (*upshoshan*)

Kutaja Medicinal Properties:⁸

Rasa (taste) - *tikta* (bitter), *kashaya* (astringent)

Guna (qualities) - *laghu* (light to digest), *ruksha* (dry)

Vipaka- *katu* (undergoes pungent taste conversion after digestion)

Veerya- *sheeta* (coolant)

Effect on *tridosha*- balances *kapha* and *pitta* dosha

PART USED: Seeds and wood

DOSAGE: Decoction-50-100 ml, powder-3-6 gm.

Stress Management: Although psoriasis is linked to genetic and environmental factors, but the psychological factors-anxiety and stress may exacerbate psoriasis in predisposed individuals. Stress may worsen psoriasis severity and may even lengthen the time to disease clearance. Dysregulation of the hypothalamus-pituitary-adrenal and sympathetic adrenomedullary systems has been proposed as one possible underlying cause of stress-induced flare of psoriasis. Inflammation is the body's way to cope with stress. Our immune system responds to injury and infection by sending out chemicals that cause inflammation and help heal a wound. In people with psoriasis, the immune system over responds-it sends out too many of those chemicals. Thus, the immune system responds in the same way to mental stress.

CONCLUSION: In developing countries, providing modern healthcare facilities is still in infancy. The most common use of *Wrightia* in modern herbal medicine includes to help support the body's ability to manage collagen levels in the skin. Stress management is very important in treating psoriasis as long as treatment is going on and even after the treatment the over as it can relapse the *kushtha roga*.

REFERENCES:

1. Davidson's Principles and Practice of Medicine, Edited by Brian R. Walker, Nicki R. Colledge, Stuart H. Ralston, Ian D. Penman; 22nd edition; Churchill Livingstone, Elsevier; 2014; Chapter no.-28; Page no.-1286
2. Dr. Brahmanand Tripathi; (1st Ed.), Charak Samhita, Maharishi Charak, Hindi commentary elaborated by Caraka and Drudhbala; Nidansthanam: *kushtha nidanam*, chapter-5, Chaukhamba Prakashan, Varanasi; 2012; Page no. - 624

3. Acharya Vidyadhar Shukla and Prof. Ravidutt Tripathi, (2nd Ed.), Charak Samhita, Maharishi Charak; Hindi commentary elaborated by Caraka and Drudhbala ,Chaukhamba Pratishthan, Delhi; 2015; Chikitsasthanam: kushtha Chikitsa adhyay, chapter no.-7,verse no.-4th,5th, page no.-181
4. Dr. Brahmanand Tripathi; (1st Ed.), Charak Samhita, Maharishi Charak, Hindi commentary elaborated by Caraka and Drudhbala; Nidanasthanam: kushtha nidanam, chapter-5, verse no.-4th, Chaukhamba Prakashan, Varanasi; 2012; Page no. - 624
5. https://en.wikipedia.org/wiki/Wrightia_tinctoria (18/03/2018)
6. Acharya Vidyadhar Shukla and Prof. Ravidutt Tripathi, (2nd Ed.), Charak Samhita, Maharishi Charak; Hindi commentary elaborated by Caraka and Drudhbala ,Chaukhamba Pratishthan, Delhi; 2015; Chikitsasthanam: kushtha chikitsa adhyay, chapter no.-7,verse no.-56th, page no.-188
7. Dravya Guna Vigyan,(2nd Ed.); By Acharya Priyavrat Sharma; Chaukhamba Academy, Varanasi; 2013; Aamhar

- (upshoshan) Varga; Chapter-Kutaja; Page no.-466, verse-by bhav Prakash
8. Dravya Guna Vigyan,(2nd Ed.); By Acharya Priyavrat Sharma; Chaukhamba Academy, Varanasi; 2013; Aamhar (upshoshan) Varga; Chapter-Kutaja; Page no.-465
9. <http://www.psoriasisselfmanagement.com/natural-herbs-supplements/wrightia-tinctoria-for-psoriasis/> (28/03/2018)

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