

## PSORIASIS (EKA KUSHTHA) LITERATURE REVIEW AS PER AYURVEDIC AND MORDEN PERSPECTIVE

Dr. Preeti Prajapat<sup>1\*</sup>, Dr. Pramod Kumar Mishra<sup>2</sup>, Dr. Indu Sharma<sup>3</sup> and Dr. Suman Bishnoi<sup>4</sup>

<sup>1,4</sup>M.D. Scholar P.G. Department of Kayachikitsa, University College of Ayurveda, Dr. Saravepalli Radhakrishnan Rajasthan Ayurveda University, Jodhpur, Rajasthan, India.

<sup>2</sup>Professor and Head of the Department, P.G. Department of Kayachikitsa, University College of Ayurveda, Dr. Saravepalli Radhakrishnan Rajasthan Ayurveda University, Jodhpur, Rajasthan, India.

<sup>3</sup>Associate Professor P.G. Department of Kayachikitsa Govt. Ayurveda College of Udaipur, Rajasthan, India.

Article Received on  
15 Sept. 2021,

Revised on 05 October 2021,  
Accepted on 25 October 2021

DOI: 10.20959/wjpr202113-22101

### \*Corresponding Author

**Dr. Preeti Prajapat**

M.D. Scholar P.G.

Department of Kayachikitsa,  
University College of  
Ayurveda, Dr. Saravepalli  
Radhakrishnan Rajasthan  
Ayurveda University,  
Jodhpur, Rajasthan, India.

### ABSTRACT

Psoriasis is a noninfectious, multifactorial, chronic inflammatory autoimmune disease characterised by scaling and itching in papulosquamous skin lesions that leads to skin hyperproliferation. The disease has remained a major issue due to its recurrence. The backs of the forearms, shins, the area around the navel, and the scalp are the most commonly affected parts of the body. *Eka Kushtha* is a *Vata Kapha Kshudra Kushtha* with a *Vata Kapha* predominance. Psoriasis treatment with *Ayurveda* is both safe and effective. Psoriasis is treated with a mix of *Shodhana Chikitsa*, *Shamana Chikitsa*, lifestyle management, and a healthy diet, according to *Ayurveda*. The properties of *Dravyas* such as *Vata Kapha Shamaka*, *Rakta Prasadana*, *Vishaghna*, *Kushthaghna*, and *Kandughna*, among others, have been described by *Acharyas*. These properties of *Dravyas* aid to break down

the pathogenesis of psoriasis. In *Shodhana* therapy, *Ayurvedic* physicians have effectively used *Vamana*, *Virechana*, *Shirodhara*, and other procedures to treat Psoriasis for a long time.

**KEYWORDS:**– Psoriasis, *Eka Kushtha*, *Shodhana Chikitsa*, *Shaman Chikitsa*.

## INTRODUCTION

Psoriasis is among the most well-known auto-immune disorders, with major psychological and social impacts.<sup>[1]</sup> It is a chronic inflammatory disease with skin manifestations that can be aggravated or recurred by a variety of triggering factors, including psychological (anxiety, stress, depression, etc.),<sup>[2]</sup> dietary (incompatible diet),<sup>[3,4]</sup> lifestyle disturbances<sup>5</sup>, environmental stress / changes, medications,<sup>[6]</sup> and etc. Prevalence of Psoriasis is raising an alarming picture, as presently about 120-180 million of global population suffer from Psoriasis.<sup>[7]</sup> In India, the overall incidence of psoriasis is 1.02 percent of all skin patients<sup>8</sup>. Contemporary available management options (synthetic drugs) are not very promising are not very promising and have been reported to have adverse effects.<sup>[9]</sup>

The word “*Kustha*” means that which makes ones skin look disgraceful or unattractive.<sup>[10]</sup> *Kushtha Roga* is classified into two groups in the *Ayurvedic* classics: *Mahakushtha* and *Kshudrakushtha*, which are further divided into seven and eleven varieties, respectively. *Tridoshas* get vitiated as a result of *Mithyaahara*, *Vihara*, and *Karma*, impacting the *Twak*, *Rakta*, *Mangsa*, and *Lasika* (*Ambu*), and thus it produces *Kustha*. It is one of the “*Astha Mahagada*”.<sup>[11]</sup> The classical aspects of *Kustha*, with special reference to *Ekakustha* are discussed in detail in this article, as well as its modern counterpart, Psoriasis. *Ayurvedic* herbs are a better therapeutic intervention because they are more potent, more effective. *Ayurvedic* procedures such as *Vamana*, *Virechana*, and others to successfully manage Psoriasis.

## Definition

**Psoriasis (Modern concept):-** The word “psoriasis” derives from the Greek word “psora,” which meaning “itch,” “scurf,” or “rash.” Psoriasis is a chronic inflammatory and scaling skin disease.<sup>[12]</sup>

## *Kustha* (Ayurvedic concept)

“*Kushnati iti Kustha*” refers to that which makes one skin look disgraceful or unattractive or that which destroys *Twak* and other *Dhatus* is called *Kustha*.

## Epidemiology

Psoriasis can affect both male and female equally and it can occur at any age. Although it is most commonly appears for the first time between the ages of 15 and 25 years. The Prevalence of this disease in western populations is estimated to be around 2%-3%.<sup>[13]</sup>

## **Etiology**

### **Environmental factors**

Mechanical injuries, UV rays, and chemical injury; various infections; prescription drug use; psychological stress, smoking; and other factors can all be environmental triggering factors. Infection with group A streptococci is the most important of these. Guttate psoriasis outbreaks are frequently preceded by streptococcal throat infections, which can lead to chronic plaque psoriasis. Psychological stress plays a very crucial role.<sup>[14,15]</sup>

### **Diet**

It has been suggested that diet plays a role in the aetiology and pathogenesis of psoriasis. Psoriasis was found to be improved in 60% of patients who changed their dietary habits. In some studies, fasting periods, low-energy diets, and vegetarian diets improved psoriasis symptoms.<sup>[16]</sup>

### **Genetic factors**

Research studies found that there is a clear genetic basis in psoriasis, as the incidence was found to be much higher amongst first and second degree relatives of patients with psoriasis.

### **Immunologic factors**

Psoriasis is an autoimmune disease, which has been proven. TNF- levels in the dermis and circulation have been found to be elevated in studies. Increased T cell activation in the underlying skin is associated with psoriatic lesions.<sup>[17]</sup>

Psoriasis is aggravated by a number of factors. Stress, excessive alcohol consumption, and smoking are among them. Psoriasis individuals may suffer depression and a loss of self-esteem. Certain medications such as lithium salt and beta blockers have been related to trigger or elevate the disease.<sup>[18]</sup> Excessive alcohol consumption, smoking and obesity can worsen psoriasis or make the management of the condition difficult. People suffering from the advanced effects of the human immunodeficiency virus, often show signs of psoriasis.<sup>[13]</sup>

### **Nidana**

**Aharaja nidana-** Taking an excessive amount or using particular foods on a regular basis, such as new formed rice, heavily digestible foods, citrus fruits, buffalo milk, curd, fish, jaggery, unrefined sesame oil, Horse gram, black gram, field beans, sugar-prepared foods

(sweets), and carbohydrate-rich foods. Improper food habits play a significant role in the etiology of *Kustha*.<sup>[19]</sup>

**Viharaja nidana-** Excessive sun exposure, day sleep, sexual intercourse, suppressing the body's natural urges, excessive worry/grief, and excessive physical exertion.<sup>[20]</sup>

**Sansargaja nidana-** *Sansargaja Vyadhi* (Communicable or infective disease) is associated with *Kushtha*.<sup>[21]</sup>

**Manasika nidana** - Excessive worry, grief, antisocial activities, sinful activities and other punishable activities are all examples of behavioural misconduct.

**Kulaja nidana-** *Kushtha* is considered as *Adibala Pravratya Vyadhi*, which means that it is a hereditary disorder.<sup>[22]</sup>

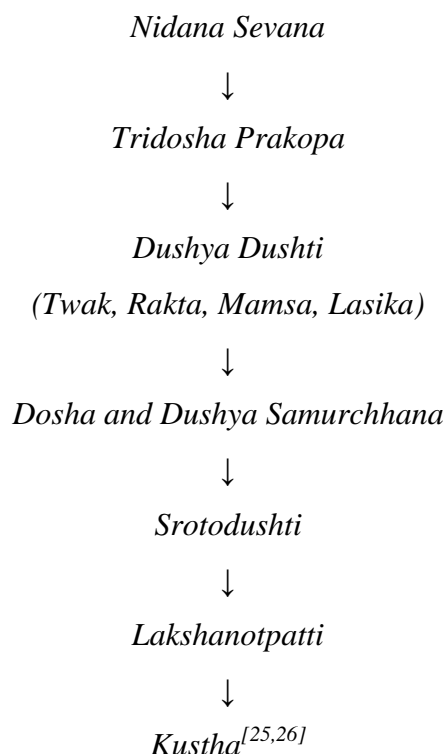
**Poorva janmakrata-** According to *Acharaya Sushruta*, if a person had *Kushtha* in a previous life and if he takes rebirth then he develops *Kushtha* in his present life also.<sup>[23]</sup>

### Pathophysiology

Surface proteins and antigen-presenting cells, such as dendritic cells or macrophages, are required for cutaneous inflammatory T-cell activation: (1) T-cell receptor and antigen interaction, and (2) Co stimulation, which is mediated through various surface interactions. T-cells that have been activated migrate into the skin from lymph nodes and the bloodstream, where they release cytokines (INF $\gamma$ , IL-2) that induce pathologic changes. Other cytokines produced by local keratinocytes and neutrophils include TNF-  $\alpha$  and IL-8. Keratinocyte proliferation is triggered by T-cell production and activation. Human leukocyte antigens (HLA) C $\omega$ 6, TNF  $\alpha$  and IL-3 have been linked in studies of histocompatibility antigens.<sup>[24]</sup>

### Samprati-Ghatak

- *Dosha– Vata Kapha Dosha Prakop*
- *Dushya – Ras, Rakta, Mansa, Lasika*
- *Srotas – Rasavaha, Raktavaha, Mansavaha*
- *Srotodusti – Sanchaya Vrutti*
- *Udhbhavasthana – Amashaya, Pakvashaya*
- *Vyaktasthana – Ubhay pradeshi*

*Samprapti***Types of psoriasis**

**Plaque psoriasis (Psoriasis vulgaris):** It is the most common psoriasis type. It affects the majority of people with psoriasis. Plaque psoriasis typically appears as raised areas of reddish skin covered with silvery white scaly skin. These are called plaques.<sup>[27]</sup>

**Pustular psoriasis:** It appears as elevated bumps that are filled with non-infectious pus (pustules). The skin under the pustules and around them is red and sensitive. Pustular psoriasis can be localised, affecting the hands and feet most commonly, or generalised, affecting any area of the body at random.<sup>[27,28]</sup>

**Nail psoriasis:** Change the appearance of the fingers and toes in a variety of ways. Discoloration under the nail plate, pitting of the nails, thickening of the skin under the nail, loosening (onycholysis), and crumbling of the nail are types of these changes.<sup>[27,29]</sup>

**Guttate psoriasis:** It has a lot of small oval (teardrop-shaped) spots. They appear all over the body, including the trunk, limbs, and scalp. Streptococcal throat infection has been associated to guttate psoriasis.<sup>[27,30]</sup>

**Flexural psoriasis (Inverse psoriasis):** It appears as smooth, inflamed skin patches. It's mostly found between the thighs and groin area, armpits, under an overweight stomach (pannus), and below the breasts (infra mammary fold).<sup>[27,31]</sup>

**Erythrodermic psoriasis:** It involves the extensive inflammation and exfoliation of the skin over most of the body surface and may be accompanied by intense itching, swelling and pain. It is often the outcome of an exacerbation of unstable plaque psoriasis, specially after the abrupt withdrawal of systemic treatment. This type of psoriasis may be lethal, because more severe inflammation and exfoliation disturb the body's ability to regulate temperature and for the skin to perform barrier functions.<sup>[27,32]</sup>

### Premonitory Signs and Symptoms

Psoriasis can go undetected its first occurrence or during its earlier stages with symptoms that appear mild as small, faint, dry patches.<sup>[33]</sup>

### *Purvaroop*

- *Sparsajnatva*- lack of touch sensation in the skin lesion area
- *Atisweda* – Excessive sweating
- *Loma Harsha* – Horripulation
- *Kandu, Toda, Shrama* and *Klama* – itching, pricking pain, physical exhaustion and mental fatigue.
- Discoloration and elevation of the skin's patches (*Kotha*).
- *Shoolam* - Severe pain in the ulcerated areas.
- *Vranaadhikam* – Instantaneous appearance and continued persistence of these ulcers and
- *Daha, Suptangata* – Burning sensation and numbness.<sup>[34]</sup>

### Common symptoms include

Red skin plaques are frequently covered in loose silver scales. Psoriasis is most commonly associated with this symptom. These lesions are often large, itchy, and painful. Cracking and bleeding may occur. In the most severe cases, these patches merge together to cover the entire body's surface. -Irritated patches of skin with elevated, thick dots ranging in colour from pink-red salmon to red. These skin patches or skin spots are frequently covered with silvery scales, as discussed previously. Elbows, knees, trunk, and scalp are all red. Though these are the most common locations for psoriasis symptoms, they can appear anywhere on the body.

Nail discoloration and disfigurement Thickness, yellow-brown spots, dents and pits on the nail surface, detachment of the nail from the base, and crumbling of the real nail may occur. There is a lot of dandruff on your head. Silver scales or crust can form as loose flakes that shed constantly.<sup>[35]</sup>

### **Rupa**

Absence of sweating (*Asvedana*), *Yatmatsyakalopamam* - Resembles fish scales and has a lot of localisation. It happens as a result of an elevation in *Vata and Kapha Dosha*.<sup>[36]</sup>

### **Diagnosis**

Psoriasis is usually diagnosed by looking at the skin. A biopsy may be ordered if the dermatologist is unsure whether the patient has psoriasis.

Your doctor may do blood tests and X-rays to rule out other forms of arthritis if you have symptoms of psoriatic arthritis, such as swollen and painful joints.<sup>[37]</sup>

### **Roga Pariksha**

- 1) *Pratyaksha*
- 2) *Darshan and Sparshanpariksha*

### **Prognosis**

According to scientific evidence, the physical and mental disabilities associated with moderate to severe psoriasis are similar to those associated with other chronic health conditions like heart disease and cancer. Factors Involved Smoking, alcohol consumption, metabolic syndrome, lymphoma, depression, suicide, melanomas, cardiovascular disease, respiratory disorders, diabetes, kidney disease, and arthritis are all associated to psoriasis. These factors could also be to account for the mortality risk seen in patients with severe psoriasis.<sup>[38,39]</sup>

### **Sadhya-Asadhyata**

The following types of patients suffering from *Kustha* should not be treated, according to *Ayurvedic* classics. The *Kusta* patient who exhibits all three vitiated *Doshas'* signs and symptoms The patient who is weak, suffers from morbid thirst, burning sensations, lack digesting strength, and has maggots in the patches of *Kustha*.

## Treatment

### Topical treatment

- Corticosteroid creams and ointments (Most common treatment)
- Synthetic forms of vitamin D and retinoids
- Retinoids
- Coal tar preparations
- Bath solutions and moisturizers
- Tacrolimus and pimecrolimus (Especially for inverse psoriasis)

### Phototherapy

**Sunlight:** Much of sunlight is composed of bands of various wavelengths of ultraviolet (UV) light. UV radiation penetrates the skin and suppresses the disease-producing process by causing activated T cells in the skin to die. This process decreases inflammation and slows the turnover of skin cells that causes scaling. Therefore, exposing affected skin to sunlight is one of the initial treatments for the disease.<sup>[40]</sup>

### Psoralen and ultraviolet a phototherapy (PUVA)

This treatment includes oral or topical administration of a medicine called psoralen along with exposure to ultraviolet A (UVA) light. UVA has a longer wavelength than UVB and so penetrates deeper into the skin.

### Ultraviolet B (UVB) phototherapy

UVB light has a shorter wavelength and is absorbed by the epidermis of the skin. A UVB phototherapy may be used for a few small lesions, to treat widespread psoriasis, or for lesions that resist topical treatment.

### Systemic treatment

**Methotrexate:**— A type of systemic medication that affects the whole immune system.

**Cyclosporine:**— Another form of systemic medicine that suppresses the immune system.

**Hydroxyurea:**— Although it is less toxic than methotrexate or cyclosporine, but may be less effective.

**Systemic retinoids:**— Compounds with vitamin A- like properties taken internally may be recommended in severe cases.



Newer medications include biologic agents, which influence a part of the body's immune response by targeting certain cells in the immune system that cause inflammation.

### Chikitsa

**Psoriasis can be effectively managed by the ayurvedic principles of management namely:**

1. *Nidana Parivarjana*
2. *Shodhana Chikitsa*
3. *Shamana Chikitsa*

#### *Nidana parivarjana*

This means avoiding etiological factors such as *Mithya Ahara-Vihara* and *Viruddha Ahara*, among others. *Nidana Parivarjana* prevents the growth of the disease by preventing *Dosha* vitiation. As a result, the main goal of treatment is to increase metabolic activities at the *Dhatu* level, rectify *Srotoavrodha*, and nourish deficient *Dhatus*.

#### *Shodhan chikitsa*

*Ekakushtha* is chronic and relapsing, and because *Vata Kapha* predominance and *Twaka*, *Rakta*, *Mamsa*, *Lasika*, and *Kleda* are all involved, recurrent *Shodhana* is required for treatment. *Samshodhana* is an important Ayurvedic treatment that works on the elimination of aggravated *Doshas* from the body. These *Doshas* (toxins and waste material) should be naturally eliminated, as well as the body's nearest root. *Shodhan Chikitsa* can be given by *Vaman* (emesis) and *Virechana* (purgation) *Raktamokshana* (blood-letting) when *Vata* is prevalent, *Ghrita* should be recommended, similarly, where the *Kapha* is prominent, *Vamana Karma* & in the dominancy of *Pitta*, *Virechana Karma* & *Raktamokshana* should be done.<sup>[41]</sup>

#### *Shamana chikitsa*

The medication for cure of different types of *Kushtha*, are categorized on the basis of aggravation of *Doshas*.<sup>[42]</sup> While *Shaman Chikitsa* administered by internal and external medication.

*Kushta* is cured by drinking *Rasanjana* (A solid extract made from *Daruharidra* decoction) with cow urine (skin diseases). *Kushtha* is cured by taking *Abhaya* with *Trikatu* (ginger, pepper, and long pepper), *Guda* (jaggery), and sesame oil for a month.<sup>[43]</sup>

*Patolamuladi Kashaya, Mustadi Churna, Triphaladi Churna,*<sup>[44,45,46]</sup> *Madhvasava, Kanakabindvarista, Triphalasava* are useful in treatment of *Kustha*.

Use of Sulphur: Administration of *Lelitaka* (Sulphur) in combination with the juice of (*Amalaki*) and honey is the best remedy for the treatment of *Kustha* types (skin diseases). The therapeutic efficacy of *Makshika Dhatu* (copper pyrite) in combination with Cow's urine is similar.<sup>[47]</sup>

Use of Mercury: If *Rasa* (mercury) is treated with sulphur or *Svarnamakshika* (copper Pyrite), the resulting *Bhasma* is an excellent treatment for all ailments. Similarly, Mercury combined with Diamond and *Shilajatu*, or *Yogaraja* cures all ailments.<sup>[48]</sup>

### **Yoga (Meditation)**

Stress is a major etiological factor in psoriasis and to remove this stress meditation is best line of treatment.

### **Diet (Aahar)**

During the course of treatment, a strict diet must be adhered to. Vegetarian diets is mostly preferable. Old rice, cucumber and green gram are beneficial.

Avoid consumption of caffeine (Coffee, Black Tea, and Dark Chocolate), Alcohol and red meat. Avoid yoghurt, black gramme, chilies, and anything salted. Avoid strictly dairy products, different sweet dishes and refrigerated (Chilled foods).

### **Vihar**

Avoid excessive stress, day time sleep, *Vegdharana* (Urges), *Atapsevan*, and *Papakarma*.

### **CONCLUSION**

Psoriasis is a non-infectious chronic inflammatory skin condition marked by well-defined erythematous plaques with silvery scales that affects both sex and all age groups. According to the Ayurvedic literature, *Kustha* is one of the most chronic disorders. *Ayurveda* detailed a vast spectrum of dermatological problems, including their classification, etiopathogenesis, clinical presentation, prevention, and management, all under the auspices of *Kustha*.

## REFERENCES

1. <http://psoriasis.about.com/1w/Health-Medicine/Conditions-and-diseases/Psoriasis-As-An-Autoimmune-Disorder>, accessed on, 2014; 16(7): 17-30.
2. Menter *et al.* Guidelines of care for the management of psoriasis and psoriatic arthritis: Section 1. Overview of psoriasis and guidelines of care for the treatment of psoriasis with biologics. *J Am Acad Dermatol*, 2008; 58(5): 826–50.
3. Acharya YT. Charaka Samhita of Agnivesha; Sutra Sthana; Atreyabhadarakapiyo Adhyay. Reprint ed. Ch. Varanasi; Chaukhamba Surbharati Prakashan, 2009; 151: 26 - 103.
4. <http://www.ayursages.com/psoriasis>, accessed on 23/07/2014 at 17.19.
5. [http://www.skincarephysicians.com/psoriasisnet/lifestyle\\_choices](http://www.skincarephysicians.com/psoriasisnet/lifestyle_choices), accessed on 22/07/2014 at 17.27.
6. <https://www.psoriasis.org/about-psoriasis/causes>, accessed on 16/7/2014 on 17.37.
7. [http://www.psoriasis-id.com/psoriasis/statistics\\_of\\_psoriasis](http://www.psoriasis-id.com/psoriasis/statistics_of_psoriasis), accessed on date 26/02/2013 at 21.54.
8. Dogra S, Yadav S. Psoriasis in India: Prevalence and pattern. *Ind J Derm Verne leprology*, 2010; 76(6): 595-601.
9. <http://www.webmd.com/skin-problems-and-treatments/psoriasis-treatment-13/dmards>, accessed on 16/7/2014 at 22.42.
10. Charak Samhita of Agnivesha Revised by Charaka and Drihabala with elaborated Vidyotini Hindi commentary by Pandit Kashinath Sastri and Dr. Gorakha Natha Chaturvedi.
11. Sushruta Samhita, Ayurveda Tatva Sandeepika Hindi commentary by Vaidya Priyavrat Sharma, Chaukhamba Sanskrit Pratisthan Varanasi, Sutrasthan, 33: 4-5.
12. Questions and Answers about Psoriasis 1`National Institute of Arthritis and Musculoskeletal and Skin Diseases.
13. Kuchekar AB, Rohini RP, Kuchekar SB, Dhole SN, Mule PM Psoriasis: A Comprehensive Review. *Int J Pharm Life Sci*, 2011; 2: 857-877. Link: <http://bit.ly/372ObRe>
14. Deka D, Borah T Swarnakar A, Baruah D, Bharali BK Psoriasis: A Comparative Study as per Ayurvedic and Modern Classics. *J Ayu Herb Med*, 2016; 2: 186-191. Link: <http://bit.ly/33JICp1>
15. Edwards CRW, BouchierI AD, Haslett C, Chilvers ER Davidsons Principles and Practice of Medicine, 18th edn (ELBS with Churchill Livingstone, USA), 1999; 48-52.

16. Sanjeev S. Tonni, Shamshad Begum, Diet in Psoriasis-An Ayurvedic Perspective, J-ISM, 2(4): 210-215.
17. Braunwald E, Isselbacher JK, Wilson JD, Martin JB, Kasper D Harrison's Principle of Internal Medicine MC Graw Hill Publications, 15: 1.
18. Kumar A Fight Psoriasis Naturally Through Ayurveda, 2016; 6: 2231-6876. Link: <http://bit.ly/34XxpBe>
19. Agnivesha, Charaka Samhita, elaborated by Charaka and Drihabala, Vaidyamanorama Hindi Commentary by Acharya Vaidyadhara Shukla, Prof. Ravi Dutt Tripathy, Chaukhamba Sanskrit Pratisthan, Delhi, 2006; 2(7), 181: 4-8.
20. Agnivesha, Charaka Samhita, Elaborated by Charaka and Drihabala Sukla Vaidyamanoramahindi commentary by Acharya Vidyadhara Shukla, Prof. Ravi Dutt Tripathi, Chaukhamba Sanskrit Pratisthan, Delhi, 2006, 2(7) 181: 4-8.
21. Sushruta Samhita, Chaukhambha bharati Academy, Varanasi, 2005; 251: 14-1.
22. Sushruta Samhita, Chaukhambha Sanskrit Sansthan, Varanasi, 2003; 250: 14-1.
23. Sushruta Samhita, Chaukhambha bharati Academy, Varanasi, 2005; 49: 14-1.
24. Dipero JT, Wells BG, Schwinghammer TL, DiPiro CV Pharmacotherap hand book; MC Graw Hill Publications, 2015; 9. Link: <http://bit.ly/2Xffren>.
25. Charak Samhita, Chikitsa Sthan, 17.
26. Byadgi P.S. Kustha, Parameswarapp's Ayurvediya Vikriti Vigyan and Roga Vigyan, 1st edition, volumeII, Varanasi, Chaukhambha Sanskrit Sansthan, 2009; 268-98.
27. Kumar A Fight Psoriasis Naturally Through Ayurveda, 2016; 6: 2231-6876. Link: <http://bit.ly/34XxpBe>.
28. Karodi R, Jadhav M, Rub RA, Bafna A Evaluation of the Wound Healing Activity of a Crude Extract of RubiaCordifolia (Indian madder) in Mice. Int J Applied Res Natural Products, 2009; 2: 12-18. Link: <http://bit.ly/33DWFMJ>.
29. A Case Report of Severe Psoriasis in a patient with AIDS: The Role of the HIV Virus and the Therapeutic Challenges involved. National Skin Center, 2002; 3.
30. Shaikh G, Ali S, Talmale S, Surwase US Alternative Medicine for Psoriasis-Natural Herbal Ayurvedic Treatment-A Review. Int J Ayu Herb Med, 2012; 2: 455-463. Link: <http://bit.ly/2CAPbhI>.
31. Kameshwari MNS, Paramasivam G Urginea indica and it role in psoriasis: A Review. Int J Pharm Life Sci, 2012; 3: 2236-2242. Link: <http://bit.ly/2KiYS8F>.
32. Lebwohl M The role of salicylic acid in the treatment of psoriasis. Int J Dermatol, 1999; 38: 16-24. Link: <http://bit.ly/36Y1yCk>.

33. [www.mariobadescu.com/symptoms of psoriasis](http://www.mariobadescu.com/symptoms%20of%20psoriasis).
34. Charak Samhita, Chikitsa Sthan, 7; 11-12.
35. [www.mariobadescu.com/symptoms of psoriasis](http://www.mariobadescu.com/symptoms%20of%20psoriasis).
36. Agnivesha, Charaka, Drihabalaa, Charaka Samhita, Chaukhambhabharati Academy, Varanasi, 2005; 1: 643.
37. Web MD Medical Reference/Reviewed by Stephanie. S. Gardener MD ON, 2015; 05.
38. <http://www.ncbi.nlm.nih.gov/pubmed/18700909>
39. <http://emedicine.medscape.com/article/1943419-overview>.
40. Gopalani V Psoriasis Websites. Indian J Dermatol Venereol Leprol, 2004; 70: 57- 58.
41. Dr. Brahmanada Tripathi, Charak Samhita of Maharshicharak, Chukhambhaprakashan, Varanasi, Chikitsastan, chapter, 2011; 7: 39-307.
42. Charak Samhita, Chikitsa Sthan, 7: 60.
43. Charak Samhita, Chikitsa Sthan, 7: 61.
44. Charak Samhita, Chikitsa Sthan, 7: 62, 63, 64.
45. Charak Samhita, Chikitsa Sthan, 7: 65, 66, 67.
46. Charak Samhita, Chikitsa Sthan, 7: 68, 69.
47. Charak Samhita, Chikitsa Sthan, 7: 70.
48. Charak Samhita, Chikitsa Sthan, 7: 71, 72.