



## PSORIASIS A REVIEW OF CAUSES AND PATHOLOGY THROUGH WESTERN AND AYURVEDIC PERSPECTIVES

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### ABSTRACT

Psoriasis is one of complex autoimmune skin disease where world is finding some solution to heal. In treatment there are different types of drugs, ointments, Panchkarma and psychological management involved, but before that we need to clarify detail pathology according to Ayurveda and modern medicine. In this article we are going to discuss detail causes, pathology and triggering factors for psoriasis and comparison with Ayurveda.

### ARTICLE

Psoriasis is one of autoimmune skin disorder. In psoriasis Psora, means itch, or rash. Therefore in Psoriasis we called itching disease. Psoriasis affects 2.5% of the world population and in that so many patients experience arthritis we called as psoriatic arthritis. In modern Psoriasis is recognized autoimmune disease caused by genetics, the immune system and environmental factors.

In ancient times it was thought of as leprosy, as noted in the charaka samhita under the chapter for treatments and discussion on leprosy, worms and other skin conditions, which arose some time during the 1st century CE.<sup>[32]</sup> Many people were mis diagnosed with leprosy when they actually were experiencing what we now call psoriasis. These people were isolated from their communities (since leprosy is contagious unlike psoriasis) and given the treatments for leprosy.<sup>[7]</sup> The English dermatologist, Robert Willan (1757 ~ 1812) recognized psoriasis as an independent disease. He identified two categories. "Leprosia Graecorum" was the term he used to describe the condition when the skin had scales. Psora Leprosa described the condition when it became eruptive.<sup>[7]</sup> Ayurveda too has a distinction similar, according to research performed by Doctor Halpern director of California College of Ayurveda," The term Eka Kushta applies when there is a single lesion. The term vicharachika occurs when there is extensive thickening. Kitibha applies to the rough, hard qualities of the lesions." It was not until 1841 that Ferdinand von Hebra a Vietnamese dermatologist coined the term Psoriasis. The separate terms like plaque,

inverse, pustular, guttate, Erythrodermic and psoriatic arthritis that we now know of today were developed and discover within the 20th century. The treatments have evolved as well, in the west the treatments were composed of coal tar soaps and sunlight. That have grown into the vast variety of creams and types of light therapies that people have presently available.

The symptoms can come and go, relapse and subside. A person may have only a few spots on their body or entire patches covering huge sections of the body. This disease cause's great psychological and physical disrupt to the happiness and wellbeing of life for the individual. The eruptions can be in many different places and covering such large portions of the body that it can lead to depression and stress. On the flip side psoriasis it can also be triggered by stress, therefore after someone already has symptoms driven by the stress in the first place, and continuing on because the entire experience is bringing on even more stress. Diet can also be looked at as a trigger point, Western science and medicine do acknowledge that people have found remorse from cutting out gluten and inflammatory foods but The National Psoriasis Foundation does not see a direct link scientifically. Something generally triggers the skin to flare up creating an Uncomfortable variety of symptoms including inflammation and excess skin cell production, itching sometimes leading to more scabs that bleed. If the symptoms are in combination with arthritic symptoms, this is called Psoriatic arthritis. The National Psoriasis Foundation lists that there are 5 varieties of skin eruptions under the umbrella of psoriasis.

**Plaque Psoriasis:** Plaque psoriasis affects 80% to 90% of patients making it the most common. Rapid cell growth creates silvery scale, on top of irregular shaped spots of red. Generally found on the scalp, knees, elbows and lower back that may crack and bleed. "Approximately 80% of those affected with psoriasis have mild to moderate disease, with 20% having moderate to severe psoriasis affecting more than 5% of the body surface area (BSA) or affecting crucial body areas such as the hands, feet, face, or genitals" changes to diet.

**Inverse Psoriasis:** This type appears on creases and skin folds on the body, there is little to no scale and is smooth, yet still inflamed and red.

**Pustular Psoriasis:** A non contagious, non infection type of pustules with inflammation. It can cover large sections of the body or smaller regions. These are a list of triggers for pustular psoriasis listed on the National Psoriasis Foundation Webpage:

**Guttate Psoriasis:** This type of Psoriasis appears on the trunk and limbs of people under 30, in the form of hundreds of separate red lesions similar in appearance to chicken pox. These lesions may be present on the scalp/face/ears as well. Often this type will coexist with plaque psoriasis or it can be a result of an exacerbation of long term plaque psoriasis. Know triggers for Guttate Psoriasis are like Tonsillitis, mental Stress, Injury to the skin, URTI.

**Erythrodermic Psoriasis:** Erythrodermic psoriasis may result from a chronic case of Plaque Psoriasis. Affecting most of the surface area of the body, in appearances, this type resembles widespread redness of large areas of the body with pustules. In combination with intense itching and pain. The National Psoriasis Foundations says "Individuals having an erythrodermic psoriasis flare should see a doctor immediately. This form of psoriasis can be life-threatening." May cause edema, hot and cold flashes, congestive heart failure. The cause is unknown but there are some known triggers:

- Abrupt withdrawal of systemic treatment
- Severe sunburn
- Allergic, drug-induced rash that brings on the Koebner phenomenon (a tendency for psoriasis to appear on the site of skin injuries)
- Use of systemic steroids (cortisone)
- Infection
- Emotional stress
- Alcoholism

**Psoriatic Onychodystrophy:** (Nail Disease) Fingernails are involved in 50% of psoriasis cases and toenails in 35%.

What has been found by "Anne Bowcock, Ph.D., a professor of genetics at Washington University School of Medicine in St. Louis, has identified a gene mutation

known as CARD14 that when triggered leads to plaque psoriasis." All known triggers include Stress, Injury to skin, Infection, Medications and although not recognized scientifically by the National Psoriasis Foundation, diet and allergies may trigger a flare up of psoriasis as well. What does stress look like in the body? Stress is manifested by our ancient dawn of being instinct of "fight or flight" when people encounter a situation with great emotions, fear, anger, surprise they are induced into the "fight or flight" sensation taking place in the sympathetic autonomic nervous system. The individual with a genetic predisposition to psoriasis may experience a flare up soon after this stressful time or situation in their life. As stated in the Pubmed research article "Relationship between the brain and the immune system" the connection is strong, the notion that the brain and the immune system are connected come from the theory of stress. When cortisol levels are high, the body deals with stress quite well, as soon as the body stops masking the stress symptoms with cortisol, due to adrenal fatigue one may become sick due to a weakened immune system from the overload of cortisol response. This reaction is similar to what happens in the body with chemicals like caffeine. The caffeine masks the fatigue that one may be experiencing when they reach for the coffee, once they stop the coffee, their body is now weakened from the excess stimulation that their body was actually not able to handle on its own. The caffeine gave them a false sense of energy. They may need to take steps to build their strength, this is called building ojas in Ayurveda. "The communication pathways that link the brain to the immune system are normally activated by signals from the immune system, and they serve to regulate immune responses." What else does stress trigger? Many, many other symptoms and diseases including obesity, heart disease, Alzheimer's disease, diabetes, depression, gastrointestinal problems, and asthma. Just a few to mention.<sup>[13]</sup> What causes stress? jobs, children, traffic, relationships, self-doubt, health, Money was ranked as the highest stress aggravator in the U.S and in India" In 2007, Multiple studies show that patients with psoriasis presented a higher cortisol release than people without psoriasis when put in stressful situations, this may be due to a cortisol deregulation and could be treated with stress management techniques.

Stress is relative, just like everything else in this world. Human beings are living their lives with high amounts relative to what is safe and healthy.

**Ayurvedic interpretation on the disease psoriasis -** Psoriasis is one type of kushtha (skin disorders according to Charaka the term for skin disorders is the same for worms, bacteria infections and leprosy).

According to the Indian Materia Medica Kushtha is also the name for a plant, the roots are used as medicine.

Kushtha has strong antiseptic and disinfectant properties especially against streptococcus and staphylococcus it is

also an expectorant and a diuretic. Multiple Ayurvedic texts, articles and research studies classify the disease of psoriasis differently depending on the type. Ekakushta is a type of kushta, there are 17 other types. In the Indian Materia Medica psoriasis is classified as Ticharchika which in other texts is used to describe eczema.

**Classical Nidana of kushta:** Incompatible food and liquid combinations, heavy substances, suppression of natural urges particularly vomiting, exposure to intense exercise or heat post eating, exertion and fear, take in food while other food is not digested yet, use of contraindicated items while undergoing panchakarma, use of excessively new cereals (grains) curd, fish, salt and sour substances. Indulging in black gram, radish, rice flour preparations, sesame, milk and jaggery, perform sexual intercourse during indigestion, sleep regularly in day, insult brahmins, teacher (or other persons of respect) indulge in sinful activities.

### Samprapti or pathology of kushta

“Constant imbalance in the dietary habits and lifestyles, associated with the Karmic influence (Poorvajanma Kritham papam) leads to Mandagni (Poor Digestion), formation of Ama, This Ama disturbs the Dhatu metabolism in rasa (nutrient plasma), rakta (blood), mamsa (muscles) and lasika (lymph) leading to Kitiba, if kitiba is not addressed in the initial stages it goes to the deeper Dhatu – Asthi causing joint symptoms.” Some vaidyas also compares with vatrakta. Psoriasis is categorized in Ayurveda as a vata-kapha disease or tri-doshic depending on the dominant dosha, if pitta is dominant virechana is administered during pancha karma. For Kapha dominance vamana (emesis) is administered during pancha karma and if vata is dominant Ghritapana (oral administration of medicated ghee) followed by an oil enema.

Pitta is there too because of the inflammation but it is vata, the dryness and taunts kapha to come to the rescue. In this reassurance we end up seeing an overproduction of skin cells on the torso, feet, extremities, scalp, face or genitals. The overproduction of skin cells is representative of larger quantity, lower quality a common occurrence with kapha imbalance. In a study done on the effects of certain herbal formula vs. another herbal formula using two groups that both had psoriasis symptoms, 63% of them were of Vata-Kapha prakruti, which led the experimentalists to infer that it is a possibility that since psoriasis is primarily vata-kapha disease that people of vata-kapha prakruti are more susceptible to the disease. Both formulas proved effective in the treatment of psoriasis.

### Generalized symptoms of kushta

**Vata dominance symptoms:** Roughness, wasting, peircing pain, other types of pain, contracture, extensive hardness, coarseness, horripilation, blackish and reddish colors.

**Pitta dominance symptoms:** Heat, Redness, discharge, supperation, fleshy smell, moistness, falling down of organs.

**Kapha dominance symptoms:** Whiteness, coldness, itching, stability, raising, heaviness, eating away by maggots and moisture.

Ekakushtha as described by Charaka, “that which does not perspire, is extensive and like fish scales” (26) All kushta is tridoshic states Charaka, it is the prominent dosha that is treated first. “doshas are known from the specific type of kushta and vice versa, similarly causing factor is known from them and these are known from the causing factor itself.”

Some vaidyas compare psoriasis with ekakushta, kithibha or vicharchika. Palmoplantar psoriasis we can compare with vipadika.

The Charaka Samhita mentions multiple Kushta (skin conditions) although does not go into the specifics of ekakushta (psoriasis) like current medical information. Through the ayurvedic lens all psoriasis is treated similarly with consideration to doshic constitution, and the dosha that is driving this tri-doshic disease, although it is generally vata-kapha. In conclusion the disease of psoriasis is believed to be of autoimmune and genetic lineage although by treating the root cause of the symptoms through Ayurveda the disease could one day be minimized in the severity through given lifestyle practices and preventative stress reduction methods to avoid a trigger. Preventing multiple other diseases and disorders in the process.

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