



SKIN DISEASE: PSORIASIS

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ABSTRACT

Psoriasis is a common chronic inflammatory skin disease with a spectrum of clinical phenotypes and results from the interplay of genetic, environmental, and immunological factors. Psoriasis is found worldwide but the prevalence varies among different ethnic groups. There are several clinical cutaneous manifestations of psoriasis but most commonly the disease presents as chronic, symmetrical, erythematous, scaling papules and plaques. The epidemiology, clinical features, and impact on quality of life of psoriasis are reviewed. Psoriasis cannot currently be cured, but management should aim to minimise physical and psychological harm by treating patients early in the disease process, identifying and preventing associated multimorbidity, instilling lifestyle modifications, and employing a personalised approach to treatment.

KEYWORDS: Psoriasis, Plaque, Pustular, biologic.

INTRODUCTION

Psoriasis is a skin disease that causes a rash with itchy, scaly patches, most commonly on the knees, elbows, trunk and scalp. Psoriasis is a common, long-term (Chronic) disease with no cure. Psoriasis is an autoimmune skin condition that causes inflammation in your skin. A Skin condition that causes flaky patches of skin which form scales. On brown, black and white skin the patches can look pink or red, and the scales white or silvery. On brown and black skin the patches can also look purple or dark brown, and the scales may look grey. It is thought to be an immune system problem. Triggers include infections, stress and cold. That causes a rash with itchy, scaly patches, most commonly on the knees, elbows, trunk and scalp. It is common, long-term (Chronic) disease with no cure. It can be painful, interfere with sleep and make it hard to concentrate.

Psoriasis affects people of ages, and in all countries. The reported prevalence of psoriasis in countries ranges between 0.09% and 11.43%, making psoriasis a serious global problem with at least 100 million individuals affected worldwide. Psoriasis has an unpredictable course of symptoms, a number of external triggers and significant comorbidities, including arthritis, cardiovascular diseases, metabolic syndrome, inflammatory bowel disease and depression.

Common Signs and Symptoms of psoriasis

- A patchy rash that varies widely in how it looks from person to person, ranging from spots of dandruff-like scaling to major eruptions over much of the body
- Rashes that vary in color, tending to be shades of purple with gray scale on brown or Black skin and pink or red with silver scale on white skin
- Small scaling spots (Commonly seen in children)
- Dry, cracked skin that may bleed
- Itching, burning or soreness
- Cyclic rashes that flare for a few weeks or Months and Then subside

Causes of psoriasis

Psoriasis is an immune-mediated disease, which means that your body's immune system starts overacting and causing problems. If you have psoriasis, immune cells become active and produce molecules that set off the rapid production of skin cells. This is why skin in people with the disease is inflamed and scaly. Scientists do not fully understand what triggers the faulty immune cell activation, but they know that it involves a combination of genetics and environmental factors. Many people with psoriasis have a family history of the disease, and researchers have pinpointed some of the genes that may contribute to its development. Nearly all of them play a role in the function of the immune system.

Some external factors that may increase the chances of developing psoriasis include:

- Infections, especially streptococcal and HIV infections.
- Certain medicines, such as drugs for treating heart disease, malaria, or mental health problems.
- Smoking.
- Obesity.

Types

There are several types of psoriasis, each of which varies in its signs and symptoms:

- 1) Plaque psoriasis
- 2) Nail psoriasis
- 3) Guttate psoriasis
- 4) Inverse psoriasis
- 5) Pustular psoriasis
- 6) Erythrodermic psoriasis

Plaque psoriasis

The most common type of psoriasis, plaque psoriasis causes dry, itchy, raised skin patches (plaques) covered with scales. There may be few or many. They usually appear on the elbows, knees, lower back and scalp. The patches vary in colour, depending on skin colour. The affected skin might heal with temporary changes in colour (post inflammatory hyperpigmentation), particularly on brown or Black skin.

Plaque psoriasis is the most common type of psoriasis. It affects about 6.7 million adults. About 80% to 90% of people with psoriasis have plaque psoriasis.



Symptoms of plaque psoriasis include

- Raised, discoloured (Red, Brown, Grey or purple) plaques with a white or silvery surface.
- Cracks (Fissures).
- Bleeding.
- Itchiness.
- Irritation or pain.

Treatments

Treatment options for plaque psoriasis include topicals, phototherapy, oral treatments, and biologics. You and your health care provider will discuss the best treatment plan for you based on the severity of your symptoms and your medical history.

Nail psoriasis

Psoriasis can affect fingernails and toenails, causing pitting, abnormal nail growth and discoloration. Psoriatic nails might loosen and separate from the nail bed (onycholysis). Severe disease may cause the nail to crumble.



Symptoms of nail psoriasis

Color: Your nails may turn white, yellow, or brown. They may also have small red or white spots underneath.

Surface appearance: You may get ridges or grooves in your nails or pitting (small pinprick holes) on the nail surface.

Debris buildup: Chalky white material can gather under your nail, causing it to lift away from the skin. This can be painful.

Thickening: About a third of people with nail psoriasis can also get a fungal infection that can cause your nails to get thick. They may also get brittle and break.

Separation: Your nail may loosen or separate from the nail bed.

Treatments

Nail psoriasis is often resistant to some treatment options, so it can be challenging to manage without standard treatment. You and your healthcare provider may have to explore different treatment options, including:

- **Corticosteroids**
- **Medicine injections**
- **Oral medicines**
- **Phototherapy**
- **Laser therapy**

Guttate psoriasis

Guttate psoriasis is a type of psoriasis that shows up on your skin as red, scaly, small, teardrop-shaped spots. It doesn't normally leave a scar. You usually get it as a child or young adult. Less than a third of people with psoriasis have this type. It's not as common as plaque psoriasis.

Guttate psoriasis primarily affects young adults and children. It's usually triggered by a bacterial infection such as strep throat. It's marked by small, drop-shaped, scaling spots on the trunk, arms or legs.



Symptoms of guttate psoriasis

- Itching
- Spots on the skin that are pinkish-red and look like teardrops
- Spots may be covered with silver, flaky skin called scales
- Spots usually occur on the arms, legs, and middle of the body (the trunk), but may appear in other body areas

Treatments

Medications: There are several over-the-counter or prescription options for the itchy, flaky skin, as well as the dryness and swelling. They include:

- Cortisone cream for itching and swelling
- Dandruff shampoo for your scalp
- Lotions with coal tar to soothe your skin
- Moisturizers
- Prescription medicines with vitamin A
- If your case is more serious, your doctor may give you a prescription to take by mouth. These include:
- Corticosteroids
- Biologics (guselkumab, ixekizumab)
- Apremilast (Otezla)
- Deucravacitinib (Sotyktu)
- Methotrexate

Phototherapy: Also known as light therapy, this is another option. Your doctor will shine ultraviolet light onto your skin during this treatment. They may also give you medication to make your skin react more quickly to light. Sometimes, just going out into the sunshine can help.

Inverse psoriasis

Inverse psoriasis mainly affects the skin folds of the groin, buttocks and breasts. It causes smooth patches of inflamed skin that worsen with friction and sweating. Fungal infections may trigger this type of psoriasis.

It looks like a shiny, smooth, discolored (brown, red or purple) rash, and it may feel damp.

Inverse psoriasis is commonly referred to as an autoimmune disease. But the antibody that causes the condition hasn't been identified. So, it's technically categorized as an immune-mediated disease. This means

the exact cause is unknown, but experts believe it has something to do with your immune system response.



Symptoms of inverse psoriasis include

- A shiny, smooth, discolored (Brown, pink, purple or red) rash.
- Cracks (Fissures) in your skin creases.
- Itchiness.
- Moist patch of skin.

Treatments

Calcipotriene skin ointment: Calcipotriene is a form of vitamin D that helps reduce discoloration.

Corticosteroid creams or ointments: Your healthcare provider may prescribe corticosteroid creams or ointments to reduce inflammation.

Injectable medicines: Your healthcare provider may use a hypodermic needle to inject medicine under your skin or into your vein. Examples include adalimumab, etanercept and infliximab.

Oral medicines: Oral medicines are pills or capsules taken by mouth. They treat severe forms of inverse psoriasis. Examples include acitretin capsules, apremilast oral tablets and methotrexate tablets.

Pimecrolimus skin cream or tacrolimus ointment: These medicines typically treat eczema, but they may help treat inverse psoriasis, too.

Phototherapy: Phototherapy uses ultraviolet light, usually ultraviolet B (UVB), from special lamps. The ultraviolet light waves found in sunlight can help certain skin disorders, including inverse psoriasis.

Pustular psoriasis

Pustular psoriasis is a type of psoriasis that causes pus-filled blisters on plaques, which are patches of scaly, flaky skin. Pustular psoriasis is common on your hands and feet, but can form anywhere on your body. There isn't a cure for psoriasis, but treatment is available to help manage symptoms. Pustular psoriasis, a rare type, causes clearly defined pus-filled blisters. It can occur in widespread patches or on small areas of the palms or soles.



Symptoms of pustular psoriasis

- A patch of thick, discolored, Flaky and Scaly skin (Plaque).
 - Skin patch covered in fluid-filled bumps (Pustules) or blisters.
 - Mild pain or itchiness.
- Fever and chills.
Muscle weakness.
Fatigue.
Severe pain and itchiness.
Fast heart rate.
Dehydration.
Swollen legs.

Treatments

Options include using etanercept (a biologic) and cyclosporine, infliximab (a biologic) and methotrexate, or infliximab followed by etanercept.

Erythrodermic psoriasis

The least common type of psoriasis, erythrodermic psoriasis can cover the entire body with a peeling rash that can itch or burn intensely. It can be short-lived (acute) or long-term (chronic).

Approximately 1 in 3 people who develop erythrodermic psoriasis already have plaque psoriasis. Psoriasis is an autoimmune disease. It happens when your immune system is inappropriately overly active and causes harm to your own body. Inflammation from this reaction causes new skin cells to form too fast.



Symptoms of inverse psoriasis include

- Severe skin redness over a large part of the body

- Skin shedding that occurs in large sheets rather than smaller flakes or scales
- Pustules or blisters
- Burnt-looking skin
- Severe Itching
- Intense pain
- Increased heart rate
- Fluctuations in body temperature

Treatments

- Hypoallergenic moisturizers and cool compresses.
- Topical ointments like corticosteroids or retinoids.
- Nonsteroidal anti-inflammatory drugs (NSAIDs).
- Immunosuppressants like cyclosporine or methotrexate.
- Disease-modifying antirheumatic drugs (DMARDs).
- Oral retinoids.

Treatment of psoriasis

• Conventional psoriasis treatments

Unfortunately, psoriasis doesn't have a simple cure, but it does have some treatment options that can help you manage the symptoms of the disease. Topical creams can soothe inflamed skin and help reduce symptoms. They come in several versions, including corticosteroid creams, retinoid creams and salicylic acid creams.

If the psoriasis is severe or doesn't respond well to any other treatments, your doctor may prescribe an oral or an injected medication to alleviate your symptoms. These options are usually very effective, but they also come with serious potential side effects. For example, oral and injected retinoids can cause hair loss, and women who use them should not become pregnant for at least three years after use to avoid birth defects. Methotrexate is also used as a chemotherapy drug and can cause liver damage and reduced white and red blood cell counts with long-term use.

Natural psoriasis treatments

- If you prefer to focus on natural, homeopathic remedies and treatments when possible, you have several options for treating psoriasis naturally. For starters, applying thick layers of moisturizer every day can help keep your skin hydrated. Some people have reported positive results using apple cider vinegar to alleviate psoriasis itching and scaling on the scalp.
- A few minutes of sunlight each day can also help you manage psoriasis symptoms. That may sound strange for a skin condition, but sunlight actually helps eliminate the overactive white blood cells that are attacking your body. Tanning beds with UV light also serve as an option for light therapy.
- If your skin always feels particularly itchy, you can try soaking in a tub of warm water and Epsom salts. For pain and inflammation, try a cream that contains capsaicin to find some natural pain relief. Capsaicin is the component that gives chili peppers their heat,

but it also has soothing analgesic properties that can help with pain.

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