Psoriasis Overview

Psoriasis is a non-contagious, chronic (long-lasting) disease of the skin, which is typically evidenced by pink, scaly plaques, which sometimes appear in phases. It is one of the most common skin diseases, affecting around 2-5% of the Anglo Saxon population. Even at 2% that is approximately 6 million people in the USA alone.

Although psoriasis occurs in all age groups, it primarily affects adults. It appears about equally in males and females. Psoriasis occurs when skin cells quickly rise from their origin below the surface of the skin and pile up on the surface before they have a chance to mature. Usually this movement (also called turnover) takes about a month, but in psoriasis it may occur in only a few days. In its typical form, psoriasis results in patches of thick, red (inflamed) skin covered with silvery scales. These patches, which are sometimes referred to as plaques, usually itch or feel sore. They most often occur on the elbows, knees, other parts of the legs, scalp, lower back, face, palms, and soles of the feet, but they can occur on skin anywhere on the body.

Psoriasis may also affect the fingernails, the toenails, and the soft tissues of the genitals and inside the mouth. While it is not unusual for the skin around affected joints to crack, approximately 1 million people with psoriasis experience joint inflammation that produces symptoms of arthritis. This condition is called psoriatic arthritis.

The severity of psoriasis varies - some patients have only a few plaques on the scalp, in others the entire skin is affected. Often the genitals, fingernails and toenails will be involved. Apart from the more common plaque psoriasis, some patients develop a type of psoriasis on the palms and soles, referred to as pustular psoriasis. Approximately 10% of patients develop psoriatic arthritis, involving swelling and pain in the joints as with rheumatoid arthritis.

Factors in the development of psoriasis

Although heredity plays an important role in the development of psoriasis, it may not necessarily develop in every individual who has this genetic predisposition. This is referred to as latent psoriasis. Over time, certain factors can provoke chronic psoriasis. It is extremely difficult to predict how psoriasis will develop and what pattern it will follow. However, there are some factors known to provoke psoriasis or worsen an existing condition:

- Infections (e.g. tonsillitis, influenza)
- Certain drugs (e.g. high blood pressure medication, anti-depressants, anti-malarial medication)
- Stress (e.g. emotional strain, a death in the family)
- Climate (e.g. spring, autumn)
- Irritation of or injury to the skin (e.g. mechanical trauma, chemicals, scarring from surgical procedures)

What Causes Psoriasis?

Psoriasis is a skin disorder driven by the immune system, especially involving a type of white blood cell called a T cell. Normally, T cells help protect the body against infection and disease. In the case of psoriasis, T cells are put into action by mistake and become so active that they trigger other immune responses, which lead to inflammation and to rapid turnover of skin cells. In about one-third of the cases, there is a family history of psoriasis. Researchers have studied a large number of families affected by psoriasis and identified genes linked to the disease. (Genes govern every bodily function and determine the inherited traits passed from parent to child.) People with psoriasis may notice that there are times when their skin worsens, then improves. Conditions that may cause flareups include infections, stress, and changes in climate that dry the
skin. Also, certain medicines, including lithium and betablockers, which are prescribed for high blood pressure, may trigger an outbreak or worsen the disease.

How Does Psoriasis Affect Quality of Life?

Individuals with psoriasis may experience significant physical discomfort and some disability. Itching and pain can interfere with basic functions, such as self-care, walking, and sleep. Plaques on hands and feet can prevent individuals from working at certain occupations, playing some sports, and caring for family members or a home. The frequency of medical care is costly and can interfere with an employment or school schedule. People with moderate to severe psoriasis may feel self-conscious about their appearance and have a poor self-image that stems from fear of public rejection and psychosexual concerns. Psychological distress can lead to significant depression and social isolation.

How Is Psoriasis Diagnosed?

Occasionally, doctors may find it difficult to diagnose psoriasis, because it often looks like other skin diseases. It may be necessary to confirm a diagnosis by examining a small skin sample under a microscope. There are several forms of psoriasis. Some of these include:

- **Plaque psoriasis**—Skin lesions are red at the base and covered by silvery scales.
- **Guttate psoriasis**—Small, drop-shaped lesions appear on the trunk, limbs, and scalp. Guttate psoriasis is most often triggered by upper respiratory infections (for example, a sore throat caused by streptococcal bacteria).
- **Pustular psoriasis**—Blisters of noninfectious pus appear on the skin. Attacks of pustular psoriasis may be triggered by medications, infections, stress, or exposure to certain chemicals.
- **Inverse psoriasis**—Smooth, red patches occur in the folds of the skin near the genitals, under the breasts, or in the armpits. The symptoms may be worsened by friction and sweating.
- **Erythrodermic psoriasis**—Widespread reddening and scaling of the skin may be a reaction to severe sunburn or to taking corticosteroids (cortisone) or other medications. It can also be caused by a prolonged period of increased activity of psoriasis that is poorly controlled.
- **Psoriatic arthritis**—Joint inflammation that produces symptoms of arthritis in patients who have or will develop psoriasis.

Treatments

Although it is impossible to eliminate a predisposition to psoriasis, it is a treatable disease. Recurrence of psoriasis after treatment is largely dependent on individual factors, trigger factors and the type of treatment the patient has received. Once the trigger factors have been eliminated, the following treatments are available:

- Ointments/creams (e.g. those containing salicylic acid, cortisone, vitamin d, cignolin, tar)
- **Phototherapy** (e.g. exposure to UVB radiation)
- Photosensitizers and exposure to UVA radiation
- Combined salt bath/phototherapy (salt baths followed by UVB radiation)
External treatments are also available, for example:

- PUVA therapy (psoralen baths followed by exposure to UVA radiation)
- Spa therapy (e.g. several weeks in a coastal or mountainous climate)

The use of internal medication is reserved for only the most severe of cases as the drugs currently available can have serious side effects and regular laboratory tests are required. The standard internal drugs given for psoriasis are acitretin, fumarates, cyclosporin and methotrexate.

For more information, please see our web page at [www.beatpsoriasis.com](http://www.beatpsoriasis.com)