Psoriasis Page 1 of 13

UpToDate®



Official reprint from UpToDate[®] www.uptodate.com ©2013 UpToDate[®]

Patient information: Psoriasis (Beyond the Basics)

 Author
 Section Editor
 Deputy Editor

 Steven R Feldman, MD, PhD
 Robert P Dellavalle, MD, PhD, MSPH
 Abena O Ofori, MD

PSORIASIS OVERVIEW

Psoriasis is a chronic skin disorder that causes areas of thickened, inflamed, red skin, often covered with silvery scales. Children and adolescents can develop psoriasis, but it occurs primarily in adults. Women and men are equally affected.

The severity of psoriasis is determined by how much of the body's surface is covered and how much it affects a person's quality of life. Psoriasis is not curable, although many treatments are available to reduce the bothersome symptoms and appearance of the disease.

PSORIASIS CAUSES

Researchers have not identified the exact cause of psoriasis. However, they believe that the disease develops due to a combination of immune, genetic, and environmental factors. There are some common triggers such as cold weather, medications, or stress, although many triggers of psoriasis are unique to an individual.

Immune system — The skin is made up of three layers. The top layer is the epidermis, the middle layer is the dermis, and the inner layer is the subcutaneous layer (<u>figure 1</u>). In the epidermis, there are several layers of skin that are constantly being shed. To replace the lost cells, the body makes more epidermal cells.

Psoriasis appears to be caused by the action of the immune system. Immune cells enter the skin through blood vessels and cause the top layer of skin, the epidermis, to grow too quickly and to stop shedding properly. This causes the scaly build-up seen on areas affected by psoriasis.

Genetics — Genetic factors play a role in determining whether someone develops psoriasis. About 40 percent of people with psoriasis or psoriatic arthritis (a type of arthritis closely related to psoriasis) have family members with the disorder (see "Patient information: Psoriatic arthritis (Beyond the Basics)"). Several genes have been identified that make people more susceptible to psoriasis, but there is no genetic test that can definitely tell whether an individual will develop the disease.

Infections or medications — Infections caused by bacteria and viruses can cause flares of psoriasis symptoms. Certain medications can worsen psoriasis symptoms, including beta blockers (eg, propranolol), lithium, and antimalarial drugs (eg, hydroxychloroquine, Plaquenil[®]).

Environment and behavior — Environmental and behavioral factors also affect the risk of developing psoriasis. It is unclear if these factors actually cause psoriasis.

Psoriasis Page 2 of 13

Physical or psychological stress may trigger the development of psoriasis in people with a genetic risk of the disease. Psoriasis has been associated with obesity and an increased risk of heart disease. Smoking appears to increase the risk and severity of psoriasis, particularly for psoriasis of the palms and soles.

PSORIASIS SYMPTOMS

Symptoms of psoriasis include:

- Areas of skin that are dry or red, usually covered with silvery-white scales, and sometimes with raised edges
- Rashes on the scalp, genitals, or in the skin folds
- Itching and skin pain
- Joint pain or aching
- Nail abnormalities, such as pitted, discolored, or crumbly nails

TYPES OF PSORIASIS

There are several common types of psoriasis:

Plaque psoriasis — Plaque psoriasis tends to affect young and middle aged adults, but can occur at any age. The skin plaques (which can range from 0.4 to 4 inches (1 to 10 cm) or more) usually spread evenly across a person's scalp, elbows, knees, and back (picture 1).

Guttate psoriasis — This type of psoriasis is sometimes linked to a recent streptococcal infection, usually pharyngitis (eg, strep throat). It often affects children or young adults with no past history of psoriasis, and causes a sudden eruption of small plaques on the trunk of the body.

Pustular psoriasis — Pustular psoriasis can be a severe, and occasionally life-threatening, form of psoriasis. It develops quickly, with multiple small pustules that may join into larger areas (<u>picture 2</u>). Symptoms can include fever and abnormal blood levels of white blood cells and calcium. Pustular psoriasis can also cause pus-filled blisters on the palms of the hands and soles of the feet. These blisters can crack, causing painful breaks in the skin.

Inverse psoriasis — This type of psoriasis affects less visible body areas, such as the groin, armpits, buttocks, genitals, and the area under the breasts (<u>picture 3</u>). Sometimes this is mistakenly diagnosed as a fungal or bacterial infection.

Nail psoriasis — Some people with psoriasis develop nail problems, including tiny pits over the surface of the nails. The pits look as if someone has taken a pin and pricked the nail several times. Their nails may change to a tan-brown color and they may separate from the nail bed, a condition known as onycholysis (picture 4). In more severe cases, people have thick, crumbling nails.

Treatment of nail psoriasis is difficult, and may include injections of steroids into the nail bed, or oral medications such as methotrexate, cyclosporine, or immunomodulatory drugs. (See <u>'Psoriasis treatment'</u> below.)

Psoriatic arthritis — Up to one-third of people with psoriasis also have psoriatic arthritis, a condition that causes joint pain and swelling. Skin signs usually develop first, although about 15 percent of patients develop arthritis (joint swelling and stiffness) before symptoms of psoriasis. People with psoriatic arthritis often have severe nail problems. (See "Patient information: Psoriatic arthritis (Beyond the Basics)".)