

## Psoriasis

Psoriasis is a common skin condition where the skin develops areas that become thick covered with silvery scales. It is a common problem, and millions of people in the United States have psoriasis. The course of psoriasis is quite variable, but in most sufferers it is a chronic problem that continues for years. The presence of psoriasis can cause emotional distress.

Psoriasis is considered a skin disease, but really it is the result of a disordered immune system. The T-cells, a type of white blood cell, become over-stimulated. They then direct the skin to try and “heal” a non-existent injury. The skin reacts the same way it does when it has a fungus infection; it grows very fast, trying to “grow” the infection off the skin. These areas become the reddened, inflamed, patches with white scale on them.

There are several ways psoriasis can start. In most sufferers, the tendency to get psoriasis is inherited. It is not passed on in a simple, direct way like hair color, but involves multiple genes. For this reason, it is not always clear from whom you inherited it. Inherited psoriasis usually starts in older childhood or as a young adult. Sometimes, especially in children, a virus or strep throat triggers brief attacks of tiny spots of psoriasis.

In middle aged older adults, a non-hereditary type of psoriasis can develop. This changes more rapidly than the inherited form, varying in how much skin is involved more unpredictably. Most types of psoriasis show some tendency to come and go, with variable intensity over time.

Psoriasis flare-ups may be triggered by changes in climate, infections, stress, excess alcohol, a drug-related rash and dry skin. Medications may trigger a flare up weeks to months after starting them. These include non-steroidal anti-inflammatory drugs (Indocin, Advil, Feldene, others), blood pressure (beta-blockers such as Tenormin, Inderal), oral steroids such as prednisone, or depression (lithium).

Psoriasis tends to be worst in those with a disordered immune system for other reasons (cancer, AIDS or autoimmune disease). Psoriasis areas are worsened by scratching and minor skin injuries or irritations. Psoriasis may itch or burn. It most often occurs over the elbows, knees, scalp, lower back, and palms or soles of the feet. The skin may split or crack in areas that bend.

There are several forms of psoriasis. The most common form shows reddened areas a few inches across covered by silvery scales. Dermatologists refer to the affected areas as areas as “plaques”. Other patterns psoriasis can appear in are “inverse” (shiny, red patches in areas of friction such as in the folds of skin in the groin, the armpits or under the breasts), pustular (blisters of noninfectious pus on red skin), or “erythrodermic” (reddening and scaling of most of the skin).

Psoriasis may also affect some of your joints, causing discomfort and restricted motion, and even distortion. This occurs in about 10 percent of people with psoriasis. This is called “psoriatic arthritis”. It often affects only a few fingertips, but in some it can be severe and widespread. It also may affect the fingernails, toenails and the mucous membranes lining the genitalia and mouth.

Treatment is based on the severity of the disease and its responsiveness to prior treatments. The lowest level of treatment is topical medicine which are applied to the skin, the next level involves treatments with ultraviolet light (phototherapy) and finally, taking medicines internally. Treatments from each level are often combined, or switched around every 12 to 24 months to reduce resistance and adverse reactions.

A treatment that is effective in one person may fail in another. Both trial-and-error and personal preferences often guide treatment. Over time, psoriasis tends to resist its treatments. The locations, size and amount of psoriasis, prior treatments, and the specific form of the disorder are factored into treatment decisions.

Topical corticosteroids (topical “steroids”) are the first treatment most people with psoriasis get. Available in greatly varying different strengths, short-term treatment is often effective—at least for a while. The highest potency steroid ointments (Diprolene, Temovate, Ultravate, or Psorcon) are almost 1000 times stronger than over the counter 1% hydrocortisone. High-potency steroids may be used for treatment-resistant plaques, particularly those on the hands or feet. Overuse of high-potency steroids can lead to thinning of skin, internal side effects treatment resistance and even worsening of the psoriasis. Medium-potency steroids are used when larger areas or longer treatment times are needed. For safety reasons, only low-potency preparations are used on delicate skin areas such as the groin or face.

Dovonex (calcipotriene) is a synthetic, activated form of vitamin D3. Regular vitamin D supplements have not benefited psoriasis, and used in excess are dangerous. Dovonex ointment applied twice-daily controls the excessive production of skin cells in psoriasis. The ointment mildly irritates the skin, especially if used on the face, scalp or genitals, where the cream mildly irritates the skin, especially if used on the face, scalp or genitals, where the cream or solution versions are preferred. It is slow to work, and since it is mildly irritating, it is often combined with topical steroids. In about a third of the people who try it, Dovonex has almost no effect, while the rest do very well with it. To prevent excessive accumulation of vitamin D in the body, there are limits as to how much Dovonex can be used in a given week.

Coal tar are one of the oldest and most widely used treatments. They are non-prescription, and are applied directly to the skin, used for a medicated bath, or in medicated shampoos. It is available in different strengths, the refined forms are less irritating and don't stain, but “crude coal tar” is more potent. Because coal tar makes skin more sensitive to ultraviolet (UV) light, it is sometimes combined with ultraviolet B (UVB) phototherapy. Coal tar is safer than steroids but is messy, smelly and less effective.

SCAT treatment is the short contact treatment with anthralin. Anthralin is a very old treatment for psoriasis, but because it stains skin and clothing brown or purple it has fallen out of favor. To limit the staining an especially washable form (Micanol cream) is used for a 15- to 30-minute application, then carefully washed off with tepid water. There are no dangerous side effects, and no long term skin damage, but this treatment often fails to completely clear psoriasis and it may irritate the skin so it is unsuitable for acute or actively inflamed eruptions.

Salicylic acid is added to other creams to remove scales, and is in some non-prescription creams. It is combined with topical steroids, anthralin, or coal tar.

Tazorac is a new psoriasis gel that may be very effective. Like Dovonex it is irritating, but it has the special benefit of clearing psoriasis for a longer time after it is stopped than any other topical medication. It is often combined with topical steroids to limit the irritation. It is not clear it is safe for pregnant women, and may cause sun sensitivity where it is applied.

Psoriasis sufferers may find that a medicated bath may help soothe the skin, remove scales and reduce itching. These are done by soaking 15 minutes in oatmeal (Aveeno colloidal oilated Oatmeal, Epsom salts, or Dead Sea salts or Tar (Zetar emulsion, Balnetar oil). Application of a greasy ointment after the bath (Elta, Vaseline) is particularly helpful.

Ultraviolet light inhibits the immune system cells in the skin, and stimulates production of activated vitamin D. These slow the excessive skin growth that causes scaling. Ultraviolet light treatments include the milder UVB for the more severe or extensive psoriasis (psoralen and ultraviolet A [PUVA] therapy. Sunlight and tanning booths tend to be less effective, but can be used if appropriate plan is followed.

UVB Phototherapy - Artificial sources of UVB light work similar to sunlight. For extensive psoriasis it is more practical to start with UVB treatments instead of topical agents. UVB phototherapy also is used to treat psoriasis that does not clear with topical treatment. This is given in the office in a light booth three to five times weekly for twenty to thirty treatments. For some patients who need long term maintenance, home UVB light boxes can be prescribed. UVB is less effective if used with topical steroid medications.

PUVA - This treatment involves taking oral Oxsoralen-Ultra capsules, then exposure to ultraviolet A (UVA) light. UVA light is normally not effective for psoriasis, but the Oxsoralen makes the body more sensitive to UVA light. PUVA is normally used when more than 10 percent of the body's skin is affected or when rapid clearing is required because the psoriasis has such a negative effect on their life. PUVA treatment is more potent than UVB. PUVA tends to cause skin cancer if given too long or mixed with the drugs methotrexate or Neoral. Both PUVA and UVB are made even more effective when given with low doses of the drug Soriatane (called re-PUVA).

Doctors sometimes prescribe medicines that are taken internally for more severe forms of psoriasis, particularly when more than 10 percent of the body is involved.

Retinoids - These drugs are derived from vitamin A and include Soriatane and Accutane. Soriatane is most effective against pustular and erythrodermic psoriasis, but is also good for plaque psoriasis when combined with UVB. Both drugs can cause birth defects in pregnant women. Accutane is less effective against pustular psoriasis, but out of your system faster.

Methotrexate - This treatment, which can be taken by pill, liquid or injection suppresses the immune system just enough to control the psoriasis. Patients taking methotrexate must be closely monitored because this drug can cause liver damage or damage the blood producing bone marrow. Alcoholics and patients with long-term medical problems can not take this drug.

Hydroxyurea (Hydrea) - Compared with methotrexate, hydroxyurea is less toxic but also less effective. Hydroxyurea is sometimes combined with PUVA or retinoids. Some degree of anemia and decrease in white blood cells and platelets is usual. Like methotrexate, pregnant women or those who are planning to get pregnant must avoid hydroxyurea.

The newest advances for psoriasis are termed "biologics" medications (Enbrel, Humira, Stelara). These basically inhibit certain components of the immune system that play a pivotal role in the development of psoriatic lesions. They may cause the risk of infections to rise and may trigger new or cause recurrent medical conditions. These are generally reserved for patients who have not been successfully treated with other methods and whose quality of life is reduced due to the presence of psoriasis.