

## Psoriasis

Psoriasis is an immune disease that occurs when the life cycle of skin cells accelerates. This causes scales, red spots and sometimes itches and pain. Psoriasis spots can be mild dandruff spots or a widespread rash covering large areas of the body. Psoriasis can also affect the nails and joints of the body.

Psoriasis is a chronic, recurring disease that often appears and disappears. There is no cure for psoriasis, but its symptoms can be reduced. In addition to treatments, lifestyle measures, such as medication, smoking cessation, and managing life stress can help alleviate symptoms of the disease.



© MAYO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH. ALL RIGHTS RESERVED.



© MAYO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH. ALL RIGHTS RESERVED.



© MAYO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH. ALL RIGHTS RESERVED.



© MAYO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH. ALL RIGHTS RESERVED.



© MEDICAL EDUCATION AND RESEARCH. ALL RI



© MAYO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH. ALL RIGHTS RESERVED.

### There are many types of psoriasis. These include:

- **Common Plaque psoriasis.** This is the most common type of psoriasis. It has dry, red skin patches that are covered with silvery scales.
- **Nail psoriasis.** Abnormal thickening, discoloration and growth of nails. Severe cases may cause nails to break up or crack.
- **Guttate psoriasis.** This rain-drop like type affects primarily young people and children. It is usually caused by bacterial infections.
- **Flexural psoriasis.** It initially appears in the skin in the armpits, under the breasts, and around the genitals. It causes smooth red patches of inflamed skin that worsen with friction and sweating.
- **Pustular psoriasis.** This uncommon type of psoriasis can occur in widespread patches or in smaller parts of the hands, feet, or fingertips. General pustular psoriasis can cause fever, severe itching, and diarrhea.
- **Erythrodermic psoriasis.** It can cover the rest of the body and can cause severe itching or burning, and the patient may need to be hospitalized to prevent infections and reduce heart and kidney injury.
- **Psoriatic arthritis.** Psoriasis may cause joint swelling and pain. Sometimes joint symptoms are the first or only manifestation of psoriasis, or sometimes only nail changes appear. Symptoms vary from mild to severe, and psoriatic arthritis can affect any joint. And it is treated by a joint physician.

### **Causes of psoriasis**

The cause of psoriasis is not fully known, but it is thought to be associated with a problem with the body's immune system.

Researchers believe that genetic and environmental factors play a role in this.

### **Psoriasis / triggering factors**

- Family history. This is one of the most important risk factors. When a parent has psoriasis, this increases the risk of developing the disease, and when both parents develop psoriasis, this increases the risk for their children even more.
- Bacterial and viral infections such as sore throats or skin infections
- Injury to the skin, such as exposure to cuts, scratches, exposure to the insect bites, or severe sunburn
- Stress
- Smoking
- Alcoholic drinks
- Vitamin D deficiency
- Obesity.
- Certain medications - such as lithium-containing medicines prescribed for people with bipolar disorder, high blood pressure medication (Beta Blockers), anti-malarial drugs, and iodine-containing drugs.

### **Complications of psoriasis:**

- Arthritis. Psoriasis complications may cause joint damage and loss of function in some joints, which can be devastating.
- Eye conditions. Such as conjunctivitis and blepharitis.
- Obesity. Patients with psoriasis may be less active due to their disease.
- Diabetes. The incidence rises as the severity of psoriasis increases.
- Hypertension.
- Cardiovascular diseases, high cholesterol and atherosclerosis. The risk of cardiovascular disease is twice that of non-psoriatic people.
- Metabolic Syndrome. This group of conditions - including high blood pressure, high insulin levels and changes in cholesterol levels - increase your risk of heart disease.
- Other autoimmune diseases. Such as bowel problems (Celiac disease and Crohn's disease).
- Emotional problems and psychological stress. Decreased self-confidence and depression. And social isolation.

### **Diagnosis of psoriasis**

Often, the diagnosis of psoriasis is somewhat clear with clinical examination (skin, scalp and nails). Skin biopsy. Your doctor may need to take a small sample of skin (biopsy). The sample is sent for pathology to be examined under a microscope to establish the diagnosis and to rule out other disorders.

## **Treatment of Psoriasis**

Treatments usually depend on the type and severity of psoriasis and the affected skin areas, and the traditional way is to start light treatments - topical creams and ultraviolet (phototherapy) and then move on to treatments that have more side effects.

### **Topical treatments**

Using creams and ointments alone on the skin can effectively treat mild to moderate psoriasis. Creams containing cortisone: you have to be careful not to use it continuously to avoid side effects. If the disease is more severe, creams are more likely to be combined with oral medications or light therapy.

### **Phototherapy**

Exposure to ultraviolet (UV) radiation through sunlight or artificial light slows the cycle of skin cells and reduces exfoliation and inflammation.

- **Sun rays.** Short daily exposure to small amounts of sunlight may improve psoriasis, but intense sun exposure can worsen symptoms and damage the skin. And if the Dead Sea can be visited, the response will be faster.
- **Ultraviolet Light Therapy (NBUVB)** It is usually done 2-3 times a week until the disease improves, after which it may require maintenance only weekly sessions.
- **Using psoralen with ultraviolet radiation (PUVA).** This treatment includes taking an oral medication (psoralen) that increases the skin's sensitivity to light before exposure to ultraviolet light. UVA rays penetrate the skin deeper than UVB rays. Treatment is used in more severe psoriasis. Short-term side effects include nausea, headache, heartburn, and itching. Long-term side effects include dry and wrinkled skin, freckles, increased sun allergy, and an increased risk of skin cancer. These side effects have to be monitored.
- **Laser (Excimer).** It is used to treat mild to moderate psoriasis. A UV beam of light is directed directly to the psoriasis spots. This treatment requires fewer sessions than conventional phototherapy because of the use of more powerful radiation. Side effects may include redness and scarring.

### **Medicines taken orally or by injection.**

Used for severe psoriasis or other conditions resistant to routine treatments. Due to the severe side effects, some of these medications are used only for a short period and may be replaced by other forms of treatment.

- **Vitamin A derivatives (Acitretin and others).** Side effects may include elevated liver enzymes, blood lipids, lip inflammation, and hair loss. It can also cause serious birth defects, so women who take these medications should avoid pregnancy for at least three years after treatment ends.
- **Methotrexate.** It helps reduce skin cell production and eliminates inflammation. It may also slow the development of arthritis in some people. It may cause stomach upset, loss of appetite and fatigue. It can cause a number of serious side effects, when used long-term, including liver damage and decreased production of red and white blood cells and platelets. Monitoring is essential.
- **Cyclosporine.** This treatment suppresses the immune system and is similar to methotrexate in potency, but it can be taken only in the short term. It increases your risk of infections and other health problems, including cancer, kidney problems and high blood pressure. Therefore, long-term treatment is not used and patients have to be monitored closely.

- **Biological therapy** (Medicines that alter the immune system). Many of these drugs have been approved to treat moderate to severe psoriasis.
  - They include Etanercept (Enbrel), Infliximab (Remicade), Adalimumab (Humira), Ustekinumab (Stelara), Secukinumab (Cosentyx), and others.
  - Most of these drugs are given by injection and usually used in people who do not respond to conventional treatment or who have associated psoriatic arthritis.
  - Biological medications should be used with caution because they have strong effects on the immune system and may allow life-threatening infections.
  - People who take these medications should do several blood investigations including TB screening.
  - Although these medications are very effective, their cost is still very high.

### **Lifestyle and home remedies**

These procedures are not cure for psoriasis, but they may help you improve the skin's outward appearance and texture:

- **Take daily baths.** It helps to remove scales and soothe inflamed skin.
  - While showering, add bath oil to the bathtub or Dead Sea salts.
  - Avoid using hot water and coarse soap, which can aggravate symptoms, and use lukewarm water and mild soapy oils and fats.
  - Sit in the bathtub for about 10 minutes and then dry the skin gently.
- **Use a moisturizing lotion.** After completing your shower, use heavy moisturizers from the ointments on your skin. During cold and dry weather, you may need to use a moisturizer several times a day.
- Exposing your skin to small amounts of **natural sunlight**, even from behind the glass. However, exposure to large amounts of sunlight may stimulate and worsen the disease.
- **Avoid psoriasis triggers, if possible.**
- **Fish oil.** Omega-3 fatty acids present in fish oil nutritional supplements may reduce psoriasis-related inflammation, although varied results from studies. 3 grams or less of fish oil every day is generally safe, and you might benefit from it.