



## **PSORIASIS – AN OVERVIEW**

### **What are the aims of this leaflet?**

The British Association of Dermatologists offers three patient information leaflets on psoriasis. This leaflet has been written to provide you with an overview of the subject. It tells you what psoriasis is, what causes it, what can be done about it, and where you can find out more about it. The two other leaflets ([Topical treatments for psoriasis](#) and [Treatment of moderate and severe psoriasis](#)) give more details about the different types of treatment.

### **What is psoriasis?**

Psoriasis is a common skin problem affecting about 2% of the population. It occurs equally in men and women, at any age, and tends to come and go unpredictably. It is not infectious, and does not scar the skin.

### **What causes psoriasis?**

The skin is a complex organ made up of several different layers. The outer layer of skin (the epidermis) contains cells which are formed at the bottom and then move up towards the surface, gradually changing as they go, finally dying before they are shed from the surface. This process normally takes between 3 and 4 weeks. In psoriasis, the rate of turnover is dramatically increased within the affected skin, so that cells are formed and shed in as little as 3 or 4 days. There is also inflammation and blood vessel proliferation on the affected skin; the reasons for these are still not fully understood.

Some people are more likely to develop psoriasis than others, particularly if there is someone else in their family who has psoriasis: in other words, it is a genetic or hereditary disease (see below). However, the trigger for psoriasis to appear is often an outside event, such as a throat infection, stress or an injury to the skin.

In practice, for most patients who develop psoriasis, or for whom it clears and then comes back, no obvious cause can be detected. Usually, sunlight improves psoriasis, though occasionally it makes it worse (especially if the skin gets burned). A high alcohol intake and smoking can worsen psoriasis too, as can medicines used for other conditions - such as lithium, some tablets used to treat malaria, and other drugs such as beta blockers (medicines commonly used to treat angina and high blood pressure). There is no apparent relationship between diet and psoriasis.

### **Is psoriasis hereditary?**

Yes, but the way it is inherited is complex and not yet fully understood. Many genes are involved, and even if the right combination of genes has been inherited psoriasis may not appear.

Other features of the inheritance of psoriasis are:

- There is more likely to be a family history of psoriasis in people who get it when they are young than in those who develop it when they are older.
- A child with one parent with psoriasis has roughly a 1 in 4 chance of developing psoriasis.
- If one of a pair of twins has psoriasis, the other twin has a 70% chance of having it too if the twins are identical, but only a 20% chance if not identical.

### **What are the symptoms of psoriasis?**

- The main problem with psoriasis for many people lies in the way it looks, and the way it attracts comments from others. This can affect their quality of life.
- Psoriasis can itch and the affected skin can split, which may be painful.
- Some people with psoriasis may develop stiff and painful joints, which can be due to a form of arthritis associated with psoriasis called *psoriatic arthritis*. The joints most commonly affected are the fingers, toes, wrists, knees and ankles.

### **What does psoriasis look like?**

Lesions of psoriasis (often known as *plaques*) are pink or red, and covered with silvery-white scales. They can form a variety of shapes and sizes, and have well-defined boundaries with the surrounding skin. Some arise where

the skin has been damaged, for instance by a cut or a scratch, and this is known as the Köbner phenomenon. On the scalp, the scales heap up so that the underlying redness is hard to see. In contrast, in body folds such as the armpits and groin, the red well-defined areas are easy to see but are seldom scaly.

The severity of psoriasis varies with time, and from person to person. When it is mild, there may be only one or two plaques, whilst when it is more severe there may be large numbers.

The plaques can take up a variety of patterns on the skin:

- The most common pattern is *chronic stable plaque psoriasis*. The persistent plaques tend to appear symmetrically, most often on the knees, elbows, trunk and scalp, though any area can be involved.
- *Guttate psoriasis* is another variant. It is seen most often in children and is sometimes triggered by a sore throat. The patches of guttate psoriasis are usually small (often less than 1 cm in diameter), but numerous.
- In *unstable psoriasis*, the plaques of psoriasis lose their clear-cut sharp edges, enlarge, and sometimes join up. New ones may appear too. Occasionally the skin becomes red all over; this condition is known as *erythrodermic psoriasis*. Unstable psoriasis must be treated with bland preparations as stronger ones can make it worse.
- There are two main types of *pustular psoriasis*. The first, and most common, involves only the palms and soles (*palmo-plantar pustulosis*), where the red areas contain a mixture of new yellow pustules (containing pus) and older brown dried-up pustules. This type is slow to clear and often responds poorly to treatment. A different, unrelated, and more widespread (generalised) type of pustular psoriasis can affect any part of the skin, and is more severe.

Changes in the nails can often be seen too, if looked for carefully. They appear in up to 50% of people with psoriasis. The most striking ones are:

- Irregular pitting (indentations) of the surface of the nail
- Circular areas of discolouration under the nail
- Separation of the nail from the underlying nail bed
- Thickening of the nails

### **How will psoriasis be diagnosed?**

- Psoriasis is usually easy to recognise and a skin biopsy is seldom needed.
- If a sore throat has triggered an attack of psoriasis, your doctor may take a swab from your throat to see if bacteria known as *beta-haemolytic streptococci* are present. If they are, a course of an antibiotic may help.
- If you are suffering from painful joints, your doctor may want to take a blood test to rule out rheumatoid arthritis. If you have several inflamed or tender joints you may need to be assessed by a rheumatologist, a specialist in joint diseases.

### **Can psoriasis be cured?**

No. However, treatment to control the signs and symptoms is usually effective. The skin becomes less scaly and may then look completely normal. However, even if your psoriasis disappears after treatment, there is a tendency for it to return. This may not happen for many years, but can do so within a few weeks.

### **How can psoriasis be treated?**

This will depend on the type of psoriasis that you have, and on its severity.

#### *1. Topical therapies:*

Treatments that are applied directly to the skin are known as topical therapies. They include creams, ointments, pastes and lotions. If your psoriasis is mild, topical therapies will be the mainstay of your treatment. Topical treatments are dealt with in more detail in another of our leaflets ([Topical treatments for psoriasis](#)), and include the following:

- *Emollients*. Emollients reduce scaling and can be used as often as needed.
- *Salicylic acid*. Preparations containing salicylic acid can help heavily scaled plaques.
- *Topical steroids*. Weaker steroids often do not work very well on thick patches of psoriasis, but may do better on the face or in the skin folds. The stronger ones have possible side effects, one of which is to make your skin thinner. Your doctor will monitor their use closely. Psoriasis sometimes comes back quickly when topical steroid treatment stops.

- Tar preparations. Taking a medicated tar bath may help to remove loose scales. Tar creams or ointments help most patients but may be messy and can stain clothing.
- Dithranol. This can be used at home for minor or moderate psoriasis. Patients may be also treated in specialized units in hospitals. Dithranol may be effective on patients with thick plaque psoriasis, however, it is rarely used nowadays, since it may irritate the skin and also it stains not only the skin and clothing, but baths and showers.
- Vitamin D analogues. There are several vitamin D preparations used to treat psoriasis; calcipotriol, calcitriol and tacalcitol. They are safe, clean to use and do not stain the skin. Treatment is applied either once (tacalcitol) or twice (calcipotriol and calcitriol) daily and can go on for as long as required. Irritation may occur, especially on the face, buttocks and genitals, and these treatments should be applied to those areas only on the specific instructions of your doctor.
- Vitamin A analogues. Tazarotene is a vitamin A gel that is applied once daily to patches of psoriasis. Irritation may occur if it is applied to the face or skin folds. It is important to tell your doctor if you are pregnant or breast-feeding. You should avoid becoming pregnant during your treatment.
- Topical immunosuppressant medications, also called calcineurin inhibitors, Tacrolimus and Pimecrolimus, are creams or ointments that are used mainly for eczema but can be effective and safe on treating psoriasis on special areas like face, folds or genitals.

### ***Topical treatments for special sites:***

- Skin folds and the face. A weak steroid, a vitamin D derivative or topical immunosuppressant creams or ointments, or a tar preparation, may be prescribed for use once or twice a day. These can also be combined to increase efficacy. Regular review by your doctor will ensure that the quantities used stay within safe limits.
- The scalp. A medicated tar or coconut oil shampoo may be used in addition to a steroid or calcipotriol scalp lotion. Tar or coconut oil preparations should be rubbed thoroughly into the scalp at night and washed out next morning with a tar shampoo. Wearing a shower cap overnight helps the treatment to penetrate and protects your pillowcase from stains.
- The nails. There is no reliably effective treatment. Nails should be trimmed to prevent them catching.

## 2. Phototherapy (see separate information leaflet)

This term refers to treatment with various forms of ultraviolet light, sometimes assisted by taking particular tablets. It is helpful if the psoriasis is extensive, or fails to clear with topical treatment, or comes back quickly after seeming to clear. Topical therapy will usually continue during the phototherapy.

Two types of ultraviolet (UV) light may be given, using special machines: UVA and UVB. These are different parts of normal sunlight. Treatment with UVA is helped by taking a medication known as a *psoralen* . a combination known as PUVA therapy. Treatment with UVB does not need tablets.

Both UVB and PUVA treatments have to be given with great care, and you will have to come up to the skin department 2 or 3 times a week for a number of weeks. Full details are given in other leaflets issued by the British Association of Dermatologists ([Treatments for moderate and severe psoriasis](#) and [Phototherapy](#)).

### 3. *Internal treatments*

In cases, where the disease is very extensive or severe, patients may need oral treatment; however all of the different tablets have potential risks. In addition, you will usually have to continue with some topical therapy even though you are taking the tablets.

Your dermatologist will discuss the risks with you if you start on this kind of treatment. All of the tablets will require blood tests, and many interfere with other medicines. Female patients should not become pregnant whilst on any tablets for psoriasis, and with some of them it is important that male patients should not father a child.

The oral treatments include [acitretin](#) (related to vitamin A), [ciclosporin](#) (suppresses the immune system), [methotrexate](#) (slows down the rate at which the skin cells are dividing in psoriasis), and [hydroxycarbamide](#) (formerly known as hydroxyurea - also slows down the rate at which the skin cells are dividing).

There are also several injectable forms of treatment available for severe forms of psoriasis. The biologic medications, that target more specific components of the defence system, include [adalimumab](#), [ustekinumab](#), [etanercept](#) and [infliximab](#). Full details of these treatments can be found in the [Treatments for moderate and severe psoriasis](#) patient information leaflet.

## **What can I do?**

- It helps to educate those around you about psoriasis. A simple explanation will often turn their misconceptions into support. Make sure they know that it is not infectious.
- If possible, cut down your smoking and consumption of alcohol.
- Consider contacting others who have psoriasis through a support group.
- Stress management may be helpful.
- Always use the treatments prescribed for you.
- In the last few years, there are a number of research papers that point to the fact that there is a higher risk of heart disease, diabetes and obesity in people with psoriasis therefore it is advisable to take regular exercise, have a healthy diet and keep an eye on your blood pressure.

## **Where can I get more information about psoriasis?**

*Links to patient support groups:*

### *The Psoriasis Association*

Dick Coles House

2 Queensbridge

Northampton, NN4 7BF

Tel: 0845 676 0076

Web: [www.psoriasis-association.org.uk](http://www.psoriasis-association.org.uk)

### *Psoriatic Arthropathy Alliance*

PO Box 111

St Albans

Herts, AL2 3JQ

Tel: 01923 672 837

Web: [www.paalliance.org](http://www.paalliance.org)

### *Psoriasis Scotland Arthritis Link Volunteers*

54 Bellevue Road

Edinburgh, EH7 4DE

Tel: 0131 556 4117

Web: [www.psoriasisScotland.org.uk](http://www.psoriasisScotland.org.uk)

For details of source materials please contact the Clinical Standards Unit ([clinicalstandards@bad.org.uk](mailto:clinicalstandards@bad.org.uk)).

**This leaflet aims to provide accurate information about the subject and is a consensus of the views held by representatives of the British Association of Dermatologists: its contents, however, may occasionally differ from the advice given to you by your doctor.**

*This leaflet has been assessed for readability by the British Association of Dermatologists' Patient Information Lay Review Panel*

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