PALMOPLANTAR PUSTULOSIS

What are the aims of this leaflet?

This leaflet has been written to help you understand more about palmoplantar pustulosis. It tells you what this condition is, what it is caused by, what can be done about it, and where you can find out more about it.

What is palmoplantar pustulosis?

Palmoplantar pustulosis is a chronic condition which can affect the palms of the hands and soles of the feet. It may occur with psoriasis or without any other skin disease.

What causes palmoplantar pustulosis?

The cause of palmoplantar pustulosis is not completely understood. It affects the eccrine sweat glands, which are most common on the palms and soles. It is considered that palmoplantar pustulosis is an auto-immune disease, meaning that the immune defences of the body work against its own sweat glands. It is more frequent in people who smoke or have smoked in the past.

There is some debate whether palmoplantar pustulosis is a form of psoriasis or a disease in its own right. Psoriasis on other parts of the body is found in only 10 - 20% of patients, and certain psoriasis treatments called TNF-alpha antagonists can even trigger palmoplantar pustulosis. However, many other treatments for psoriasis do improve palmoplantar pustulosis.

Some patients experience a flare up of the condition following infections with streptococcal bacteria.
Who gets palmoplantar pustulosis?

Anybody can get palmoplantar pustulosis, but it is more common in women than in men and is unusual in children. Those with a family history of the condition have a higher risk of getting it. It may also occur in association with certain other medical conditions such as arthritis, diabetes, thyroid disorders or coeliac disease.

Is palmoplantar pustulosis hereditary?

Palmoplantar pustulosis can run in families, but most patients have no other affected family members.

What are the symptoms of palmoplantar pustulosis?

The skin of the palms and/or soles can be very itchy and sore, particularly if there are deep fissures (cracks in the skin). The condition is often chronic but the symptoms can vary, deteriorating when there is a flare.

What does palmoplantar pustulosis look like?

Palmoplantar pustulosis presents with inflammation of the palms and soles, often in a symmetrical distribution but sometimes only on one side. In acute flares the background skin is red, with small yellow or darker red blisters dotted within the red patches. These then dry up and become scaly. In the more chronic stage the skin can be dry and thickened, with deep fissures (cracks in the skin). There is a sharp cut off between normal looking and affected skin.

How will palmoplantar pustulosis be diagnosed?

In most cases, the diagnosis is made by your doctor simply looking at your skin.

Very rarely, a small biopsy may be needed to confirm the diagnosis. This requires a local anaesthetic injection and stitches to close the wound.

Is palmoplantar pustulosis serious?

Although the condition is not cancerous or infectious, the inflammation of the palms and soles can severely affect the ability to work and quality of life of the patient.
Can palmoplantar pustulosis be cured?

Palmoplantar pustulosis cannot be cured. All treatments aim to control the inflammation. Basic principles of good skin care can help to reduce the number and severity of flares (see below).

What is the treatment for palmoplantar pustulosis?

There are several different treatment options ranging from creams to light treatment to tablets, and you need to decide together with your doctor which treatment is right for you. This may change over time, as the condition is chronic.

Creams and Ointments:

- Moisturisers should be applied several times a day to prevent dryness and itching of the skin and to act as a barrier.
- Steroid creams and ointments reduce inflammation in the skin. They are stronger and more effective when applied under occlusion, for example under vinyl gloves or cling film. Unfortunately the skin can get used to steroids, so that they lose benefit if applied continuously. The potential side effect of skin thinning rarely occurs when steroid creams or ointments are used on the thick skin of the palms and soles. Steroid tapes may be helpful for the fissures.
- Tar ointments have been used for many decades to moisturize and reduce inflammation. The smell and yellow-brown colour of these greasy ointments limit their use.

Light treatment:

- PUVA and re-PUVA describe types of treatment with ultraviolet light A (UVA). The course of either treatment can take at least 10 weeks with twice weekly treatments at the dermatology department. Prior to each administration of light, psoralen tablets need to be taken or the hands and feet soaked in psoralen or painted with psoralen gel (PUVA). In re-PUVA, additional daily retinoid (acitretin) tablets are taken to improve the benefit of the light and shorten the course of treatment.
- Other forms of light are also occasionally used.

Tablets:

- Acitretin is a tablet derived from Vitamin A, and is a member of a group of drugs called retinoids. This can be effective but may not be recommended in women of child bearing age.
- Methotrexate and Ciclosporin both slow down the immune response of the body, and again are fully discussed in separate leaflets.
• **Dapsone** may also be used. Different skin conditions can respond to this drug, as detailed in another leaflet.

• Other tablets e.g. colchicine, tetracyclines, and **fumaric acid esters** may be used depending on individual circumstances and need. Your doctor will discuss your options with you.

**Self Care (What can I do?)**

• If you are a smoker, you should try to stop. Unfortunately the benefit for the skin of stopping smoking may not be immediately obvious, but your general health will benefit.

• Soap, bubble bath or shower gel should be replaced by a cream or ointment for washing. A moisturiser should be applied several times a day to reduce inflammation and dryness.

• Vinyl gloves should be worn for wet work and protective gloves for exposure to chemicals. Appropriate gloves for any gardening or manual labour will reduce aggravating friction.

• If possible, sore hands and feet should be rested.

• Socks and shoes made from natural, rather than man-made fibres are better tolerated by inflamed skin.

• Thickened skin can will crack and fissure more easily. The skin thickness can be reduced by the application of salicylic acid or urea creams (heel balm) and then gently paring the skin down with a pumice stone or emery board.

**Where can I get more information about palmoplantar pustulosis?**

http://dermnetnz.org/scaly/palmoplantar-palmoplantarpustulosis.html

www.patient.co.uk/doctor/Palmoplantar-Pustulosis-(PPP).htm

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*

**BRITISH ASSOCIATION OF DERMATOLOGISTS**

**PATIENT INFORMATION LEAFLET**

**PRODUCED MAY 2012**

**REVIEW DATE MAY 2015**