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 long term (chronic) condition which affects the skin of the palms and soles. It can sometimes occur with the skin condition psoriasis.

What causes palmoplantar pustulosis?

The cause of palmoplantar pustulosis is not understood. It is an auto-immune disease, meaning that the immune defences of the body work against itself. It is much more frequent in women, and in current or ex-smokers.

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 10-20% of patients, and some people with palmoplantar pustulosis have family members with psoriasis. Confusingly, though, the psoriasis treatments TNF-alpha antagonists are known to occasionally trigger palmoplantar pustulosis. However, many other treatments for psoriasis do improve palmoplantar pustulosis.

Some patients experience a flare up of palmoplantar pustulosis 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 rare in children. Those with family members who have palmoplantar pustulosis or psoriasis are more likely to be affected. It may also occur with 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 painful, particularly if there are deep fissures (cracks in the skin). The condition is often persistent but the symptoms can vary, becoming better and worse over time, often with no obvious cause.

What does palmoplantar pustulosis look like?

In palmoplantar pustulosis there is inflammation of the skin of the palms and soles, often symmetrically but sometimes only on one side. In flare-ups the skin is red, with small yellow pus spots (pustules) or red-brown blisters within the red patches. The blisters and pustules then dry up to become scaly. In the more persistent stage the skin can be dry and thickened, with fissures (cracks) in the skin. There is a sharp margin between normal and affected skin.

How will palmoplantar pustulosis be diagnosed?

In most cases, the diagnosis is made by your doctor simply looking at your skin. As a fungal infection can look very similar, it can be helpful for your doctor to take a painless skin scrape to check for this. A painless swab may be taken to rule out a bacterial infection. Sometimes, a small biopsy may be needed to confirm the diagnosis. This requires a local anaesthetic injection into an affected area and the removal of a small piece of skin to look at under the microscope. This is followed by stitches to close the wound. The procedure is carried out by the dermatologist under local anaesthetic, while you are awake.

Is palmoplantar pustulosis serious?

Although the condition is not cancerous or contagious, the inflammation of the palms and soles can severely affect one's quality of life. It can be painful and itchy and may affect sleep and work.

Can palmoplantar pustulosis be cured?

No. Like many skin conditions, palmoplantar pustulosis cannot be cured. There are, however, several treatment options which can improve it significantly. Basic principles of good skin care can help to reduce the frequency and severity of flares (see below).

What is the treatment for palmoplantar pustulosis?

There are several different treatment options ranging from creams to UV light (phototherapy) treatment to tablets, and you and your doctor will need to decide together which treatment is right for you. This may change over time, as the condition can be longstanding.

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. These can be prescribed or bought over the counter. The greasiest ointments are the most effective.
- Steroid creams and ointments reduce inflammation in the skin. They are stronger and more effective when applied under occlusion (under a cover), for example under a waterproof dressing, 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 impregnated tapes can be very helpful for the cracks (fissures).
- Tar ointments have been used for many decades to reduce inflammation in the skin. The smell and yellow-brown colour of these greasy ointments limit their use but some patients find them very helpful. They can be used in combined preparations with steroid ointments and salicylic acid.

Light treatment:

- PUVA and re-PUVA are treatments with ultraviolet light A (UVA). The course of either treatment can take at least 10 weeks with twice weekly treatments at the dermatology department. The 'P' refers to a psoralen, a treatment used before each light exposure to increase the skin's sensitivity to the UVA light. The psoralen is taken as tablets or by mouth, or applied to the hands and feet. In re-PUVA, daily retinoid (acitretin)

tablets are taken to improve the benefit of the light and shorten the course of treatment.

Tablets: More information on these treatments is available on the individual patient information leaflets listed under the individual drug names.

- Acitretin is a tablet related to Vitamin A, and is one of a group of drugs called retinoids. This can be very effective but is not usually recommended in women of child bearing age as pregnancy must be avoided for 2 years after taking it. A newer retinoid called alitretinoin has also been used with some success, and this can be used in women of reproductive age as long as contraception with the oral contraceptive pill or an intrauterine contraceptive device is used, as well as barrier methods. These precautions are necessary as retinoids cause very serious abnormalities in unborn babies if taken during pregnancy.
- Methotrexate and ciclosporin both reduce the immune response of the body. Methotrexate cannot be taken by men or women trying for a baby.
- Other treatments may also be tried, 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 also benefit. There is help available in the NHS for this.
- Soap, bubble bath or shower gel should be replaced by a moisturising cream or ointment for washing the affected areas. 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 including household cleaning chemicals. Appropriate gloves for any gardening or manual labour will reduce aggravating friction.
- If possible, sore hands and feet should be rested by reduction of physical or chemical triggers. Socks and shoes made from cotton, rather than man-made fibres are better tolerated by inflamed skin. Wool, however, should be avoided as it can be irritant.
- The benefit of special silk gloves or socks to help inflamed skin is debated, but such garments may be tried. Cotton gloves and socks can also be used at night over ointments to help reduce mess.
- Thickened skin will crack (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. A podiatrist can offer advice and treatment with foot care.

Where can I get more information about palmoplantar pustulosis?

http://www.patient.co.uk/doctor/Palmoplantar-Pustulosis-(PPP).htm
http://www.dermnetnz.org/scaly/palmoplantar-pustulosis.html

For details of source materials used please contact the Clinical Standards Unit (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: individual patient circumstances may differ, which might alter both the advice and course of therapy 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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