



Charity No: 1118192

Pustular Psoriasis

This information is produced by the Psoriasis and Psoriatic Arthritis Alliance

www.papaa.org



What are the aims of this leaflet?

This leaflet has been written to help you understand more about different types of pustular psoriasis, as well as suitable treatments.

What is psoriasis?

Psoriasis (sor-i'ah-sis) is a long-term (chronic) scaling disease of the skin which affects around 1 in 50 people, which is about 1.3 million, or around 2% of the UK population. It usually appears as red raised, scaly patches, known as plaques. In people with skin of colour, the redness is less pronounced, and psoriasis may appear as purple or darkened areas of skin with grey scales. The cause of psoriasis is currently unknown. Any part of the skin surface may be involved but the plaques most commonly appear on the elbows, knees and scalp. It can be itchy but is not usually painful. Nail changes, including pitting and ridging, are present in nearly half of all those who have psoriasis.

There are many different types of psoriasis, including chronic plaque psoriasis, types of pustular psoriasis (all of which are described in this leaflet), guttate psoriasis, scalp psoriasis, flexural psoriasis, napkin psoriasis, nail psoriasis and erythrodermic psoriasis (a rare, serious condition which can affect the whole body).

For those that have psoriasis, around 1 in 4 may develop an associated psoriatic arthritis (PsA), which is about 325,000 people, or around 0.5% of the UK population. PsA causes pain and swelling in the joints and tendons, accompanied by stiffness particularly in the mornings. The most commonly affected sites are the hands, feet, lower back, neck and knees. For more detailed information, see our leaflets **What is psoriasis?** and **What is psoriatic arthritis?**

What happens?

Normally a skin cell matures in 21-28 days and during this time it travels to the surface, where it is lost in a constant, invisible shedding of dead cells. In patches of psoriasis the turnover of skin cells is much faster, around 4-7 days, and this means that even live cells can reach the surface and accumulate with dead cells. This process is the same wherever it occurs on the body. The extent of psoriasis and how it affects an individual varies from person to person. Some people may only be mildly affected with a tiny patch hidden



away, which does not bother them, while others may have large, visible areas of skin involved that significantly affect daily life and relationships. Psoriasis is not contagious; therefore, you cannot catch it from another person.

Pustular psoriasis

Pustular psoriasis looks different to plaque psoriasis, although plaque and pustular psoriasis can coexist or one may follow the other. The main distinguishing feature of pustular psoriasis is the appearance of pus spots surrounded by or on top of areas of red skin. This does not mean there is infection present. The spots simply show that the skin has been invaded by white blood cells. The person is not infected and neither are they contagious in any way.

Pustular psoriasis flare-ups can be triggered by some medicines, irritating substances on the skin, ultraviolet light overdoses, pregnancy, systemic steroids (especially sudden withdrawal of tablet or high-potency topical steroids), infections or emotional stress.

Generalised pustular psoriasis

Generalised pustular psoriasis is a rarer and more serious form of the condition. It is particularly rare in children. It can occur abruptly, sometimes precipitated by the triggers mentioned above, and it can make the person feel quite unwell with fever, shivers, intense itching, rapid pulse, exhaustion, headache, nausea, muscle weakness and/or joint pain. In this condition, the pustules, redness and skin peeling can occur all over the body and, as such, people are normally admitted to hospital for treatment under the care of a dermatologist until it settles down. The skin can be very sore and fragile. Sometimes these attacks are followed by milder outbreaks of psoriasis. Please do note that this is a rare form of the condition.

Palmar-plantar pustulosis (PPP)

Palmar-plantar pustulosis (PPP – also sometimes spelled as palmoplantar) is a localised form of psoriasis which affects the palms and/or soles of the feet. Evidence suggests that it tends to occur in people between the ages of 20 and 60, and is more common in people who smoke. Infection and stress are suspected trigger factors. PPP is normally recognisable by large yellow pustules up to 5mm in diameter in the fleshy areas of hands and feet, such as the base of the thumb and the sides of the heels. It may be painful. The pustules dry up and turn a brown colour and then gradually diminish. PPP is usually cyclical though, with new crops of pustules being followed by periods of low activity. It tends to go in cycles of: erythema (reddening of the skin) followed by formation of pustules and then scaling of the skin. Sometimes the



skin can crack, which can cause discomfort, and occasionally there is a degree of functional disability.

Acrodermatitis continua of Hallopeau (ACH)

Acrodermatitis continua of Hallopeau is another rare type of palmar-plantar pustulosis. It is characterised by skin lesions on the ends of the fingers, including the nails which can sometimes become completely destroyed, and sometimes on the toes. The eruption sometimes starts after localised physical trauma. Often the lesions are painful and disabling, with the nails deformed, and bone changes may occur. This condition is quite hard to treat satisfactorily.

Treatment

These conditions are not common and are difficult to treat, so whether the pustular psoriasis is localised or generalised, treatment should be overseen by a dermatologist.

Pustular psoriasis

If you are admitted to hospital with generalised pustular psoriasis, the main aim of treatment is to restore the skin's barrier function, prevent further loss of fluid, stabilise the body's temperature and restore the skin's chemical balance. Imbalances, which can occur, might put added strain on the heart and kidneys, especially in older people. Because of possible complications with this form of psoriasis, if you're affected you should seek medical care immediately. The likelihood of hospitalisation for a short period of time depends on the severity of the outbreak. When in hospital, bed rest, bland emollient therapy, rehydration and avoiding excessive heat loss can improve the situation. It is important to remove as many of the potential trigger factors as possible, for example suspect medicines. In severe cases, where the patient has become exhausted, other medications may be needed.

To control pustular psoriasis for the longer term, a tablet or injection treatment is usually required.

Methotrexate is the most common treatment; ciclosporin is also used if your doctor needs to control the symptoms quickly. Oral steroids are often prescribed for those who do not respond to other forms of treatment or who have become very ill, but their use would be for a brief period only. PUVA (the photosensitising drug psoralen plus UVA light) may also be used once the condition has settled down. See our **Psoriasis and Phototherapy** leaflet to find out more about PUVA.

In some instances, biologic injection treatments may be used. See our **Treatments for Psoriasis and overview** leaflet.

Palmar-plantar pustulosis (PPP) treatment options

This type of psoriasis can be particularly difficult to treat. First-line treatment usually involves topical therapies, such as potent or very potent steroids, being applied to the palms and/or soles. Sometimes creams containing coal tar or salicylic acid may be prescribed to help reduce scaling. The regular application of an emollient can help prevent skin from cracking and keep the palms and soles more supple. It may be beneficial to wear cotton gloves for certain periods during the day, to prevent the treatments rubbing off and to allow the person to continue to use their hands.

Frequent use of topical therapies on the hands and feet can be impractical for most people as it makes working and daily chores difficult. For this reason, localised light treatment (PUVA) or tablet treatments such as methotrexate are often advised.

Although not completely proven, for those who smoke, quitting appears to help reduce the instances and severity of palmar-plantar pustulosis.

Acrodermatitis continua of Hallopeau

ACH tends to be resistant to both topical and systemic treatments for psoriasis, so combinations of therapy may be tried.

Most episodes of pustular psoriasis will last for a few weeks then disappear or remit to erythrodermic psoriasis.

Summary

- Pustular psoriasis is a rare form of psoriasis
- Severe cases need urgent referral to a specialist and often hospital admission
- PPP is more common in people who smoke
- PPP and pustular psoriasis flares tend to go in cycles
- The pustules are not an infection but a collection of white cells
- Pustular psoriasis is not contagious.

Useful contacts

For information about health matters in general and how to access services in the UK, the following websites provide national and local information.

- NHS UK: www.nhs.uk
- NHS England: www.england.nhs.uk/
- NHS Scotland: www.scot.nhs.uk/
- Health in Wales: www.wales.nhs.uk
- HSCNI Services (Northern Ireland): <http://online.hscni.net>

These sites are the official sites for the National Health Service and provide links and signposting services to recognised organisations and charities.

About this information

This material was produced by PAPAA. Please be aware that research and development of treatments is ongoing. For the latest information or any amendments to this material, please contact us or visit our website: www.papaa.org. The site contains information on treatments and includes patient experiences and case histories.

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A peer review has been carried out by Dr Thivi Maruthappu MA MRCP, senior clinical fellow in medical dermatology, St John's Institute of Dermatology in February 2017 and February 2019. Minor revisions PAPAA editorial team September 2020. A further peer review has been carried out by Dr Thivi Maruthappu MA PhD FRCP in April 2024.

A lay review panel has provided key feedback on the content in this leaflet. The panel includes people with or affected by psoriasis and/or psoriatic arthritis.

Quality and accuracy

To learn more about how this material was developed and produced and the criteria we use to deliver quality support and information, go to our website and read the PAPAA Pledge: www.papaa.org/pledge

If you have any views or comments about this information or any of the material PAPAA produces, you can contact us via the details on the back page or online at www.papaa.org/user-feedback

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