Pustular Psoriasis

It is somewhat confusing to have two types of psoriasis with similar names i.e. Generalised Pustular Psoriasis, which is quite a rare and serious form of psoriasis and, Pustular Psoriasis of the palms and soles (also referred to as palmoplantar pustulosis, PPP).

What is Pustular Psoriasis?

Pustular psoriasis of the palms and soles, also referred to as palmoplantar pustulosis, or PPP, is a chronic inflammatory skin condition where crops of sterile pustules (yellow pus spots) on the palms and soles of the feet erupt repeatedly over months or year. The affected areas become red and scaly, cracks may form and these are often painful. It has been thought to be a pustular variant of psoriasis.

When pustular psoriasis is referred to without any further description, however, it usually means a much rarer and serious from of the disease where pustules are visible at other sites, this is often referred to as generalised pustular psoriasis or von Zumbusch pustular psoriasis. When pustules are visible in areas other than the palms and soles it very often means that psoriasis is in an unstable stage, and spreading very rapidly, this may make the patient feel quite ill from loss of heat and fluid resulting in feverish type symptoms.
In generalised pustular psoriasis the skin is covered with very small pustules on a background of very red, hot skin. This can develop quickly and so is essential to get medical help immediately.

The fluid in the pustules is not an infection or bacteria, and the pustules are not contagious.

Causes of Pustular Psoriasis

As with other types of psoriasis, infections or stress may be a trigger factor in PPP. A strong association with smoking has also been identified, the mechanism of which is uncertain but may be linked to the products of smoking encouraging the inflammatory cells to accumulate in the epidermis (the top layer of the skin).
Generalised pustular psoriasis can be triggered by an infection, sudden withdrawal of topical or systemic steroids, pregnancy, and some prescription drugs.

Treatments

Topical treatments are normally prescribed first for PPP, in particular topical steroid creams and ointments. The doctor, nurse or dermatologist may advise the use of topical steroids under hydrocolloid occlusion (a type of dressing). Other forms of treatment that are used elsewhere can also be employed, i.e. tar, dithranol and bland emollients; salicylic acid is often incorporated into these preparations as it helps to reduce the thick scaling. PPP is typically stubborn to treat, should this be the case, the dermatologist may prescribe a course of PUVA therapy. PUVA therapy for the hands and feet may either involve oral psoralen or topical psoralen in which case it is applied like a paint

– this is then followed by exposure to the ultra-violet A radiation. This modified PUVA treatment using a paint is especially useful for the feet; the patient sits with the soles exposed to a small UVA machine (as opposed to standing in a cabinet, where of course the soles are not reached by light).
A combination of PUVA with the oral retinoid Acitretin (RePUVA) has also been found to be effective for difficult to treat PPP, and is possibly more effective than the two treatments being used alone. Methotrexate and ciclosporin can also be used to treat PPP.
People with generalised pustular psoriasis often require hospitalisation for rehydration and topical and systemic treatments. These treatments typically include antibiotics and other systemic medications such as acitretin, ciclosporin or methotrexate. PUVA may be used once the severe stage of pustulosis and redness has passed.

Age of onset

Pustular psoriasis of the hands and feet can occur at any age, but is rare in children and teenagers.
Generalised pustular psoriasis can also develop at any age, even occasionally in childhood, though it would be very rare at that time.

It is important to note that pustular psoriasis, like any other form of psoriasis, is not catching in any way.

Acropustulosis (acrodermatitis continua of Hallopeau)

This rare type of pustular psoriasis is characterised by skin lesions on the ends of the fingers and sometimes on the toes. Often the lesions are painful and disabling, producing deformity of the nails. Occasionally, in severe cases, there may be bone changes.
The eruption may start after an injury to the skin, however studies investigating the cause of the disease have led scientists to believe that the staphylococcal infection plays a role.
Unfortunately, acrodermatitis continua of Hallopeau has been traditionally hard to treat. Initial treatment is with a steroid based ointment, often under occlusion. Oral drugs have been used with some success in clearing the lesions and restoring the nails. As with other forms of pustular psoriasis PUVA therapy may also be used.