The role of the practice nurse in managing psoriasis in primary care

DR DAVID BUCKLEY, MRCGP, DP DERMATOLOGY, MD, SOLAS DERMATOLOGY & LASER CLINIC, THE ASHE STREET CLINIC, TRALEE, CO KERRY

Psoriasis is a chronic, common skin condition affecting about 3% of the Irish population. It can occur at any age and both sexes are affected equally. Approximately 50% of patients will have a first-degree relative with psoriasis, which shows that there is a strong hereditary component. There are certain well-known triggering factors, including hormones, infection, drugs, alcohol and stress. It is probably more common that the psoriasis causes stress rather than vice versa.

The practice nurse has an important role in managing this chronic disease as patients need explanations, reassurance and education on how to manage the disease.

It has been more recently recognised that psoriasis can be linked to increased incidence of cardiovascular disease, with strokes and peripheral vascular disease being more common in patients with psoriasis. Psoriasis patients also have a higher incidence of hypertension, hyperlipidemia, central obesity, liver disease and type II diabetes. Adult patients with psoriasis should be screened for these conditions and strongly encouraged not to smoke and to keep alcohol consumption to a minimum.

Psoriatic arthritis
Psoriatic arthritis can occur in up to 5% of patients with psoriasis, although some patients with quiet severe psoriatic arthritis might only have mild skin manifestations of the disease. Conversely patients with severe psoriasis may have no psoriatic arthritis.

Psoriasis is a T-cell mediated disease in which the epidermis renews itself up to six times faster than normal in the affected areas, resulting in thickening and red scaling of the skin. Psoriasis may appear in traumatised skin such as a cut or burn – this is known as the Koebner phenomenon.

Nail changes are found in up to 60% of patients with psoriasis, which can often help in clinching the diagnosis in unusual cases. Pitting and onycholysis (lifting of the nail from the nail bed) are the most common nail changes. Sometimes nails can be thickened, discoloured or may fall off as a result of psoriasis. It can be difficult and sometimes almost impossible to differentiate between nail psoriasis and fungal nail infection. Sending nail clipping for fungal stain and culture may be the only way to make the diagnosis. Some patients can have psoriasis infecting the nails with little or no skin involvement. Apart from systemic therapies, there is no effective treatment for nail psoriasis.

There are various clinical types of psoriasis, the most common being chronic plaque psoriasis, small plaque psoriasis, guttate psoriasis and flexural psoriasis.

Guttate psoriasis
Guttate usually presents in young adults and may be precipitated by a streptococcal sore throat. Small plaques of psoriasis can be distributed all over the body but mainly along the trunk and upper arms. Gutta is the Latin word for teardrop, and this type of psoriasis looks like a shower of red scaly teardrops that have fallen down on the body. The rash can develop quite quickly over a couple of days but usually clears spontaneously after 6 or 12 weeks.

Treatment is usually with emollients or a 10% tar and 10% urea cream, which can be applied all over the affected areas twice a day. More severe protracted cases usually respond well to Dovobet or phototherapy.

Psoriatic arthritis can occur in up to 5% of patients with psoriasis, although some patients with quiet severe psoriatic arthritis might only have mild skin manifestations of the disease.
**Chronic plaque psoriasis**

Chronic plaque usually causes large red scaly plaques on the elbows and knees. Plaques are also commonly found on the lower back and the scalp. However, any part of the body can be affected including the face. Small plaque psoriasis causes a similar rash but as the name implies the plaques are smaller usually measuring only 2 – 4 cm in diameter. Many patients have learned to live with plaque psoriasis, particularly when it is localised to the elbows and knees and they can manage with simple emollients and clothing that will cover up the affected area. Younger patients and women might find it harder to live with this type of psoriasis and often require treatment (see Table 1).

Calcipotriol (Dovonex) is a vitamin D analogue and is often used as a first line treatment for more troublesome plaque psoriasis. However because of its slow onset of action, Calcipotriol is often combined with a potent topical steroid such as betamethasone (Dovobet) resulting in a much more rapid response, which encourages the patient to continue the treatment. It can take up to 6 or 12 weeks to clear psoriasis. Because the Dovobet contains a potent steroid it cannot be used on the face or flexures and is not licensed for children and teenagers under the age of 18. It is also best not to use it long term because of the risks of skin atrophy and systemic absorption. Most patients find that by using Dovobet once daily to the affected areas on the body for one month, it will give approximately 50% improvement in the appearance of the rash. Patients should then be weaned off Dovobet in the second month by using it only on Saturdays and Sundays and using Dovonex once daily on the other five days of the week. In the third month, Dovobet should be stopped completely and the patient should use Dovonex on its own seven days a week until the psoriasis clears. The ointment preparation is considered more potent but also more messy than the jel formulation. The maximum weekly dose of Dovonex is 100g/week in adults and it should not be used on more than 30% of the body surface area.

In children, Dovonex can be used in the mornings and Eumovate ointment applied at night to the rash on the body for the first month. The child should then be weaned off the Eumovate over the next month or two.

Although expensive, Dovonex is safe when used correctly, is convenient, clean and non-smelly for the patient, and can help clear psoriasis in 60% – 70% of patients with chronic stable plaque psoriasis and small plaque psoriasis. However, it does not work for all patients.

Dithranol has been on the market for almost two hundred years, and is known to have an anti-inflammatory and anti-proliferative effect for home use. Dithranol is best used as Dithrocrem, which comes in various strengths, from 0.1% up to 2%. This can be safely applied to plaques of psoriasis on the body and scalp once daily for 30 minutes, and then washed off. Patients are usually instructed to increase the strength of the Dithrocrem once weekly until they reach the high strength after five weeks (2%). Patients have to be careful to apply Dithranol only to the affected areas, as it will cause burning of uninvolved skin, particularly when the patient goes up to stronger strengths. Dithranol also causes temporary brown staining of the skin, and therefore is unsuitable for the face. The staining usually fades after a week or two once Dithranol is stopped. As Dithranol contains no steroid, it is safe (even weekly) in children. It can clear psoriasis in approximately 80% of patients, when used correctly, and it can result in long remission times. However, because it causes staining and takes longer for the patient to apply, it is usually reserved for second-line treatment.

Coal tar preparations can also be effective in psoriasis although they can be messy to use and smelly. Coal tar 10% is often combined with urea 10% and this ointment can be applied rubbing downwards twice a day to help clear psoriasis. Coal tar is often used in combination with other treatments, such as Calcipotriol (Dovonex, Dovobet) or dithranol. Tar is often used in combination with salicylic acid to descale the scalp (e.g. Cocois). Patients with more severe, extensive or resistant psoriasis or psoriatic arthritis should be referred on
Did you know as a nurse you can also access our award winning medical newspaper online at

www.mindo.ie

Access your digital copy today!
Psoriasis on the face or flexures usually presents with more erythema and itch and less scale.

For hospital treatments, such as phototherapy or systemic therapies such as methotrexate, fumaric acid esters, or the new biological therapies such as Humira.

**Face and flexures**
Psoriasis on the face or flexures usually presents with more erythema and itch and less scale. Calcipotriol, potent steroids, and Dithranol cannot be used on these areas but because the skin is thinner and less scaly often 1% hydrocortisone can help. An anti-yeast agent is often combined with 1% hydrocortisone for the face and flexures. Calcipotriol is a potent topical steroid (Dovobet gel) or Dithranol. Dovobet Gel, which is a combination of calcipotriol and betamethasone, should only be used overnight and washed out in the morning. After a week or two it can usually be reduced to 2 or 3 times a week. Scalp psoriasis often co-exists with seborrhoeic dermatitis, so an anti-fungal shampoo such as ketoconazole (Nizoral) or Ciclopiroxolamine (Stieprox shampoo) should be used once or twice a week on a regular basis.

**Summary**
While psoriasis is rarely life threatening, it can cause a lot of distress, particularly in younger patients with more extensive disease. Fortunately the vast majority of patients with psoriasis can be managed in primary care and the practice nurse has an important role in managing this chronic disease.

**References on request.**
For more information:
Email: info@asctralee.com
Website: www.skinlaserclinic.ie