CURRENT THINKING ON... THE TREATMENT OF MILD TO MODERATE PSORIASIS

Welcome to our CPD module series for community pharmacy technicians. Written in conjunction with the ***Pharmacy Magazine*** CPD series, it will mirror the magazine's programme throughout the year. The series has been designed for you to use as part of your continuing professional development. Reflection exercises have been included to help start you off in the CPD learning cycle.

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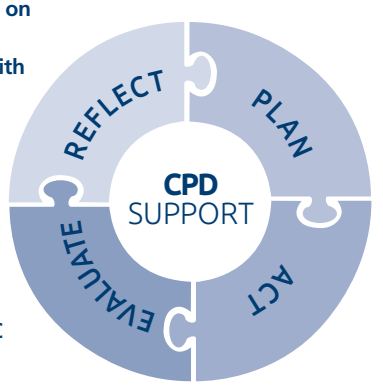
MODULE NUMBER: 57

AIM: To provide an update on the current treatment of mild to moderate psoriasis.

OBJECTIVES: After completing this module, you should:

- Know more about psoriasis, including its symptoms and their impact on sufferers
- Be familiar with the pros and cons of possible treatments
- Understand how MURs can help patients
- Be able to respond to requests for OTC product advice.



Psoriasis is a chronic inflammatory skin disease that follows a relapsing and remitting course. It affects about two per cent of the UK population. Most patients have mild to moderate psoriasis that can be managed with topical treatment. Nevertheless, the impact of psoriasis on quality of life can be as great as cancer, arthritis, hypertension, heart disease, diabetes or depression.

A range of topical treatments are available for mild to moderate psoriasis and patients often require several products. Given the complexity of treatment and the need to balance efficacy with tolerability, potential toxicity and feasibility of use, there is significant scope for medicines use reviews (MURs) for patients using prescribed treatment for mild to moderate psoriasis. Community pharmacy services can make an important contribution towards helping patients to self-manage with effective treatments.

Clinical features

Chronic plaque psoriasis is the most common form of the condition, accounting for about 90 per cent of cases. It is characterised by well-defined, thickened, red patches of skin covered with silvery scales that are readily shed.

The most commonly affected areas are the scalp, the extensor (outside) surfaces of the limbs (e.g. shins and elbows) and the lower back. The plaques can crack and bleed and many find psoriasis patches itchy.

The scalp is affected in about 80 per cent of psoriasis patients, and profuse shedding of skin scales from the scalp can be a serious problem for some people. Psoriasis can also affect the flexures (e.g. armpits, groin, genitals).

Pathophysiology

The major biological abnormalities in psoriasis are:

- Excessive production of skin cells (hyperproliferation), which leads to thickening of the epidermis and scaling
- Abnormal development of skin cells
- Inflammation
- Stimulation of growth of skin blood vessels.

Cell-mediated immune mechanisms appear to drive these processes. A growing understanding of this area has led to the use of biological agents, including adalimumab, etanercept, infliximab and ustekinumab for the treatment of moderate to severe psoriasis.

Nails, joints and other problems

Some or all of the fingernails and toenails are affected in about 50 per cent of patients, and a proportion of patients also suffer from psoriatic arthritis. In addition, psoriasis is associated with blood lipid abnormalities, obesity, diabetes and cardiovascular diseases (e.g. myocardial infarction, hypertension). Patients also often experience low self-esteem, depression, social isolation and stigmatisation.

The Dermatology Life Quality Index (DLQI) is a validated quality of life measure for people with skin diseases that is incorporated into National Institute for Health and Care Excellence (NICE) Technology Appraisals for the use of biologics in psoriasis. It is based on 10 questions that explore aspects of the disease that are important to patients, such as discomfort caused by the disease and whether the disease has interfered with work or study. It gives a score between 0 and 30 – above 10 is interpreted as having a large impact on quality of life.

Treatment options

Most patients with chronic plaque psoriasis have a mild form of the disease that can be managed in a primary care setting using topical treatments, and this is the first-line treatment option. Successful treatment depends on good adherence and correct application of products.

Topical treatment options include emollients, topical corticosteroids, vitamin D analogues, coal tar and dithranol. Patients usually need different products for three areas of the body – trunk and limbs, face and flexures (where the skin is thinner) and the scalp. The NICE guideline recommends that treatments should be tried in a logical sequence until satisfactory products are found.

Should there be an unsatisfactory response at any stage, it is important to check whether there have been difficulties with application, cosmetic acceptability or tolerability before changing to a different treatment. If problems have prevented effective use of a treatment, it may be possible to offer an alternative formulation.

Patients should be offered a supply of their treatment to keep at home for self-management of the condition.

- **Emollients**

All patients with psoriasis should be encouraged to use an emollient regularly. Emollients restore pliability to the skin and reduce the shedding of skin scales, which patients find embarrassing. They can also reduce pruritus (itching) and help prevent painful cracking of the skin as well as bleeding. Patients should be encouraged to experiment with emollients

until they find products that suit them. Emollients that contain humectants (e.g. urea or glycerin) are generally more effective moisturisers and have longer-lasting effects. Suitable products include Eucerin Dry Skin Intensive 10% Urea Treatment Cream, Hydromol Intensive and Neutrogena Dermatological.

An emollient bath additive can also be used to counteract the drying affects of bathing.

- **Corticosteroids**

Topical corticosteroids do not smell, stain or cause irritation and are often effective for controlling flare-ups. However, these advantages have to be balanced against the risks of local side effects such as skin thinning, the risk of rebound psoriasis after discontinuation and the risk of systemic side effects. In order to minimise the risk of side effects, there should be a four-week break between courses of treatment with potent or very potent corticosteroids. Vitamin D or coal tar products may be used during this time.

- **Vitamin D**

Vitamin D and vitamin D analogues normalise skin cell behaviour in psoriatic plaques and can clear psoriasis in six to eight weeks. The most effective way to use them is in combination with a topical potent corticosteroid (current first-line treatment). Vitamin D products do not smell or stain like tar and dithranol. Nor do they carry the risk of the skin thinning, which is seen with topical steroids.

- **Tar preparations**

Coal tar has been used in the treatment of psoriasis for decades. It is believed to be keratolytic, with some anti-inflammatory and anti-proliferative effects. In addition to proprietary preparations, crude coal tar, one to five per cent in white or yellow soft paraffin or emulsifying ointment has been used. Crude coal tar stains clothing and smells unpleasant to many people. In addition, it is less effective than vitamin D derivatives. Coal tar is present in a number of OTC products.

- **Dithranol**

Dithranol has been used for the treatment of psoriasis for many years. It is believed to exert a direct anti-proliferative effect on epidermal keratinocytes. It is profoundly irritant to normal skin, causing inflammation and severe blistering. It causes a purple-brown temporary staining of skin and also stains clothing and bathroom fittings permanently.

For many years, dithranol has been incorporated into Lassar's paste (zinc and salicylic acid paste BP) so that it can be applied to psoriasis plaques and kept away from uninvolved skin. This is made in concentrations from 0.1 per cent up to two per cent and the concentration used is gradually increased according to the patient's response.

In recent years, short-contact dithranol treatment (SCDT) has been used, which involves application of dithranol in concentrations of up to eight per cent for between 15 and 30 minutes, with or without UVB irradiation. For some patients, SCDT is suitable for home use.

A response can be expected within 20 days, but care must be taken to avoid contact with normal skin and facial skin.

Dithranol treatment is impractical if there are multiple small plaques and it is not suitable for the treatment of flexural psoriasis because of its irritant nature.

reflection exercise

Potent topical corticosteroids are recommended as first-line treatment for psoriasis affecting the trunk, limbs and scalp. Consider how you would explain the risks of continual use of such products to ensure effective use without fuelling 'steroid phobia'.

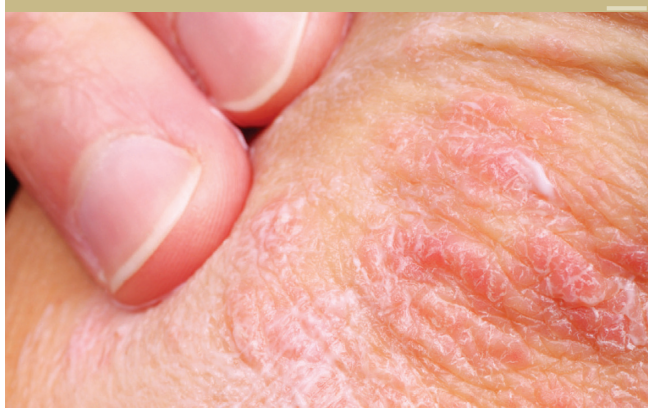


Table 1: OTC products for psoriasis

Class of product	Examples
Emollients containing coal tar	Psoriderm (coal tar 6%), Carbo-Dome (coal tar solution BP 10%), Exorex lotion (coal tar solution 5%)
Scalp ointments	Cocois / Sebco (coal tar solution 12%, salicylic acid 2%, precipitated sulfur 4%, in a coconut oil emollient basis)
Shampoos containing coal tar	Polytar, Alphosyl, Neutrogena T/Gel Therapeutic Shampoo
Bath additives containing coal tar	Polytar, Psoriderm
Products containing salicylic acid	Capasal shampoo can be useful if there is heavy shedding of skin scales from the scalp

Treatments for scalp psoriasis

When psoriasis affects the scalp, it can feel itchy, tight or sore. Some people appear to have a bad attack of dandruff, shedding large numbers of silvery-white skin flakes, while others have a thick, unsightly layer of scales. Treatments for scalp psoriasis include products to soften and loosen the scales, products to treat inflammatory lesions, and shampoos.

A tar-containing shampoo may be sufficient to control mild scalp psoriasis. More severe instances of the disease require treatment with oils and keratolytic agents to remove the scales and then treatment with topical corticosteroids and/or vitamin D products to treat the inflammation.

"All patients should be encouraged to use an emollient regularly"

Systemic non-biological treatment

Systemic non-biological (immunomodulatory) agents are methotrexate, ciclosporin and acitretin. Each requires careful monitoring to minimise the risk of harmful side effects.

Systemic biological therapy

The biologics act by blocking components of the immune response that play a part in psoriasis. The major advantage of biologics is that the treatment is given by injection and, in general, the side effects appear to be less wide-ranging than with the conventional systemic agents. The main disadvantages are:

- Patients need to learn to self-inject, or be prepared to spend time in hospital at regular intervals for intravenous (IV) infusions
- The long-term effects of these agents are as yet unknown.

Guidance on the use of biologic agents is set out in NICE Technology Appraisals 103, 134, 146 and 180. A Final Appraisal Determination (FAD) recommendation for use of secukinumab on the NHS was released by NICE this month.

Apremilast (Otezla from Celgene) – the first of a new class of systemic non-biological drugs – was approved in Europe in January 2015. The dose has to be titrated up over the first week to minimise the occurrence of GI side-effects.

Unlike the agents described above, apremilast does not require intensive monitoring for toxicity.

OTC treatments

The OTC products that can be helpful to patients with psoriasis are limited to emollients, products containing coal tar and products containing salicylic acid. These can be useful to patients with mild psoriasis (see table 1).

NB: Eumovate Eczema and Dermatitis Cream (clobetasone butyrate 0.05%) may not be supplied for the treatment of psoriasis.

Further reading

- NICE clinical guideline CG153. Psoriasis: The assessment and management of psoriasis, October 2012. Available at: www.nice.org.uk/nicemedia/live/13938/61190/61190.pdf

scope for MURs

Patients using topical treatments are likely to have four different topical products, which means there is plenty of scope for misunderstandings and forgotten information. It is estimated that up to 40 per cent of patients with psoriasis are non-adherent to their treatment regimens, and this is often because they experience problems applying the treatments. An MUR provides an opportunity to check that products are being used correctly, to assess the response, to explain other treatment options if appropriate and to signpost the patient appropriately.

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Next month: We focus on eye conditions.