PETER, 24-YEARS OLD, presented with an itchy, scaly scalp (see Figure 1). Despite regular shampooing, symptoms worsened. The heavy scaling and need to scratch was causing considerable distress. Scaling was prominent especially at the temples and frontal hair margin and extended on to the skin just beyond the scalp margin.

What is the diagnosis and how would you manage this presentation?

The most likely diagnoses to consider are seborrhoeic dermatitis and psoriasis. Tinea capitis is unlikely with this presentation - a localised, scaly patch with alopecia would be more typical.

A full skin examination is necessary to help differentiate between seborrhoeic dermatitis (forehead, eyebrows, ears, nasolabial folds, presternal area, flexures) and psoriasis (knees, elbows, sacral area, nails).

Seborrhoeic dermatitis

The diagnosis of seborrhoeic dermatitis is clinical and based on the distribution of the rash in areas outlined above. Clinically, a fairly well demarcated, erythematous rash is covered by greasy looking scales. The amount of erythema and scaling varies widely, sometimes with minimal redness and considerable scaling and vice versa. Most patients with seborrhoeic dermatitis do not have seborrhoea (an increased production of sebum). It is a chronic condition that presents in a relapsing remitting course. It is important to emphasise this relapsing tendency to the patient.

The important role of Malassezia furfur (previously called Pityrosporum ovale) in the pathogenesis of seborrhoeic dermatitis is now accepted. It colonises most skin but is especially found in areas of seborrhoeic dermatitis. The dermatis may reflect a toxic or allergic reaction to M furfur. In adults it is most common between the ages of 18 and 45 years.

Mild seborrhoeic dermatitis of the scalp presents as dandruff, ie. diffuse, fine, powdery white scale on the scalp. Variable inflammation may be present, from none at all to being severe enough to cause temporary alopecia. Itch is variable. External ear canal and post-auricular fold involvement may present with fissuring, oozing and secondary bacterial infection. The central forehead, eyebrows, eyelids and naso-labial folds are frequently involved. It may become apparent when a man grows a moustache or beard and disappears when they are shaved off. Males often have a patch over their sternum.

Treatment aims to control the acute episode and maintain remission in the long term. The importance of good hygiene with regular washing using a moisturiser or antifungal shampoo needs to be emphasised.

Treatment of acute episode

Mild: Anti-dandruff shampoo, eg. zinc pyrithione (Head and Shoulders), coal tar (T Gel, Exorex, Capasal), selenium sulphide (Selsun).

More severe: Ciclopiroxolamine shampoo (Stieprox) twice weekly or ketoconazole shampoo (Nizoral) twice weekly.

Inflammation (itch, erythema): Add topical steroids for two weeks, eg. Betamethasone (Betacap, Betnovate, Betta-mousse). For hair margins use a less potent steroid –
clobetasone (Eumovate). If not responding to steroid plus antifungal consider tar applications (Exorex).

**Thick scale:** Options include: Cocois scalp application – if scale is not so thick. Sometimes the application needs to be left on longer than advised on the patient information sheet supplied with product. If scale is thick: warm olive oil applied to scalp and washed out with coal tar shampoo after three to four hours, or salicylic acid 2%-10% (depending on scale thickness) in soft paraffin overnight, and washed out with tar shampoo in the morning.

**Maintaining remission**
Once the acute episode is controlled it is important to introduce a maintenance regimen to reduce risk of recurrence. Options include:
- Antifungal shampoo: Head and Shoulders, T Gel, Exorex, Capasal or Selsun twice weekly
- If these are not effective use Stieprox or Nizoral twice weekly.

**Psoriasis**
Psoriasis presents with erythematous, scaly, well demarcated plaques on the scalp, knees, elbows and coccyx area. (see Figure 2). Flexures may be involved in inverse psoriasis. Nail involvement is common. About 2% of the population is affected and the peak age of onset is late teens to early twenties.

The plaques of psoriasis are very well demarcated and feel elevated to touch. The scales are white rather than the waxy colour found in seborrhoeic dermatitis. Scratching the plaques makes the scale more prominent – a very useful sign. The elevated plaques on the scalp often feel more apparent by using all fingers when going through the patient's hair.

If inflammation is severe there may be reversible alopecia (hair-loss).

**Treatment of psoriasis**
If the scale is very thick one may use 10% salicylic made up in soft paraffin applied to involved areas and washed out with a tar shampoo in the morning.

If the scale is moderate use Cocois ointment (coal tar 12%, sulphur 4%, salicylic acid 2%). Cocois ointment left on the scalp for one hour is very acceptable and is now the standard treatment in primary care. It is applied nightly until a response is achieved and then as required. Covering with a shower cap seems to increase response. In more severe cases it may be left on overnight. Exorex is another tar option.

**Steroid lotion at night:** betamethasone valerate (Betnovate or Betacap scalp application or Bettamousse) may be used in combination with tar, calcipotriol or dithranol. Steroid applications should not be applied continuously for more than a month at a time. After one month tachyphylaxis can be a problem, ie. the longer a preparation is used the less the response. However, when combined with any of these treatments steroids improve and speed the response.

**Calcipotriol scalp solution:** May be slow to work. Thick scaling must be removed prior to starting it.

Dithranol applied carefully and combined at the start with topical steroids may be useful in recalcitrant cases. Usually, dithrocream is needed. It will stain the hair. It needs patient commitment for success.

**So what has our patient got and how can we help ?**
The lack of well-defined borders and plaques and other features of psoriasis suggested seborrhoeic dermatitis as the diagnosis. The scales are finer and more like dandruff than one would expect with psoriasis.

Peter was prescribed:
- Cocois scalp application at night. When scaling was much reduced this was replaced with stieprox shampoo
- Nizoral cream to facial skin adjacent to hair margin daily
- When the rash was cleared he was advised to use Head and Shoulders shampoo to wash his hair and any area of skin involved in dermatitis.

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**Irish College of General Practitioners**

**Drug Misuse Programme CME 2007**

Please watch the ICGP website [www.icgp.ie](http://www.icgp.ie) for any updates in the Drugs Misuse Programme

**CME meeting dates:**

**Date:** March 6, 2007  
**Topic:** TBA  
**Time:** 7.30pm-9.30pm  
**Venue:** ICGP, 4/5 Lincoln Place, Dublin 2

**Date:** October 3, 2007  
**Topic:** TBA  
**Time:** 7.30pm-9.30pm  
**Venue:** ICGP, 4/5 Lincoln Place, Dublin 2

To reserve a place at the CME sessions, please email your full contact details and the meeting date you will be attending to: niamh.killeen@icgp.ie