A 49-year-old woman with seborrhoeic dermatitis

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A middle-aged woman with mild but recurrent seborrhoea on her face seeks treatment. Seborrhoeic dermatitis tends to be chronic and episodic and there is no long-term cure. What is the most appropriate management of this patient?

Case scenario

Janet is a 49-year-old woman with recurrent flaky patches and red skin around her nasal folds and mouth, as well as her eyebrows and hairline. She is perimenopausal and has no medical conditions and takes no medications.

Commentary

The characteristics of Janet's skin problem are consistent with seborrhoeic dermatitis. This is a chronic, relapsing condition affecting areas of skin with a high density of sebaceous glands (face, scalp, central chest and genital areas). Adult-onset seborrhoeic dermatitis is a common condition affecting the middle-aged and elderly populations. A recent comparative cross-sectional study found the point prevalence of seborrhoeic dermatitis to be 14.3%, and cited previous estimates of between 2 and 23% in selected populations.[1]

Seborrhoeic dermatitis is commonly associated with other medical conditions and certain patient characteristics and lifestyle factors (Box). The condition is more common in men than in women and is usually diagnosed after the age of 20 years.

Pathogenesis

Seborrhoeic dermatitis has long been considered a result of the *Malassezia* spp. of lipophilic yeasts causing inflammation. However, it is not clear why this yeast, which is present on normal healthy skin, may cause inflammation in some people and not others.

Although the use of antifungal medications correlates with reduced inflammation it does not always correlate with reductions in the amount of malassezia yeasts (*M. globossa* and *M. restricta*) on the skin.[2] A recent proposed model of seborrhoeic dermatitis links a change in the balance of the skin microbiome to an associated interplay between the immune system and skin barrier function.[2]

CONDITIONS, PATIENT CHARACTERISTICS AND LIFESTYLE FACTORS COMMONLY ASSOCIATED WITH SEBORRHOEIC DERMATITIS

Conditions

- HIV/AIDS
- Some neurological conditions (e.g. Parkinson's disease)
- Hypertension
- Depression
- Immunosuppression

Patient characteristics/ lifestyle factors

- Male sex
- Caucasian descent
- Winter climates
- Alcohol consumption
- Tobacco exposure
- Obesity

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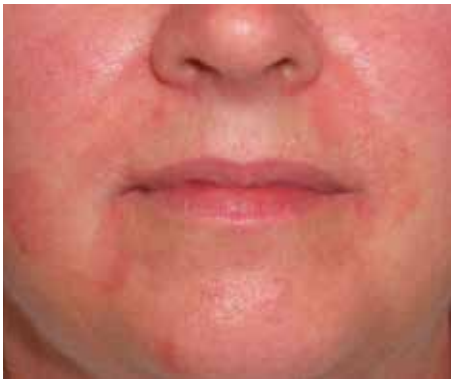

Figure. A female patient with the typical flaking and redness of seborrhoeic dermatitis of the nasofacial and nasolabial folds.

Clinical presentation and diagnosis

Common characteristics of seborrhoeic dermatitis include erythematous flaking and scaling macules on sebaceous skin. On the face, it commonly affects the folds including those behind the ears, the conchal bowls, the glabella and the nasolabial folds (Figure).

Seborrhoeic dermatitis is also seen in hair-bearing skin of the scalp, chest, back, axilla and genital areas. In the scalp and beard the scale may be greasy and thick. The condition may be irritating, for example when blepharitis affects the eyelid margins; however, it is the appearance of the skin that is usually of most concern to patients.

Differentiating seborrhoeic dermatitis from other scaling disorders and conditions involving erythema is important. Features of similar scaling and erythematous facial conditions are presented in Table 1. It is important to take a history and examine the patient for features of these conditions. In many cases there may be a combination of conditions, and treatment of one may worsen the other. For example, using topical corticosteroids on seborrhoeic dermatitis may worsen coexisting rosacea.

The diagnosis of seborrhoeic dermatitis is a clinical diagnosis. A biopsy may show overlapping features of dermatitis and psoriasis. In severe cases that are unresponsive to treatment, HIV serological testing may be considered.

Treatment

Seborrhoeic dermatitis tends to be chronic and episodic and there is no long-term cure; however, the signs and symptoms can be managed. General advice about managing modifiable lifestyle risk factors should be given, such as reducing alcohol consumption.

Topical therapy

A basic skin-care regimen to help maintain skin barrier function is recommended. This would include a nonsoap wash and gentle emollient. A keratolytic (e.g. salicylic acid) may be added to reduce scale.

TABLE 1. FEATURES OF CONDITIONS THAT MAY CAUSE SCALES AND ERYTHEMA ON THE FACE

Condition	Characteristics
Seborrhoeic dermatitis	• Symmetrical erythematous macules • Flaking/greasy scale • Affects skin folds: – glabella/medial eyebrow – nasolabial and nasofacial – posterior ear
Rosacea	• Combination of: – erythema – telangiectasia – papules and pustules – phymatous change • Sensitive skin • Predominantly central facial distribution
Psoriasis	• Well demarcated • Silvery/white scale • Classical symmetrical involvement of: – elbows – knees • Other areas involved include: – natal cleft – scalp – nails • Psoriasis can also be associated with arthropathy
Allergic contact dermatitis	• Pruritus • History of exposure/allergen • Commonly involves: – eyelids – neck – hands
Tinea capitus	• Annular lesions • Scaling edge with central clearing • Asymmetrical distribution
Malignancy (Bowen's disease and superficial basal cell carcinoma)	• Pink macules/plaques • Isolated lesions • Dermoscopic features may be distinctive

A Cochrane review and recent systematic review of topical therapy found that topical corticosteroids, topical azole antifungal agents and calcineurin inhibitors are effective treatments for seborrhoeic dermatitis.[3,4] Table 2 shows examples of some topical treatment regimens.

TABLE 2. EXAMPLES OF TOPICAL TREATMENT REGIMENS FOR SEBORRHOEIC DERMATITIS

Agent	Frequency
Face and body	
Antifungal creams	
Ketoconazole cream 2%	Once or twice daily as required
Miconazole cream	Twice daily as required
Clotrimazole cream	Twice daily as required
Topical corticosteroids	
Hydrocortisone 1%	Daily for 1 to 2 weeks as required
Desonide lotion 0.05%	Daily for 1 to 2 weeks as required
Topical calcineurin inhibitors	
Pimecrolimus 1% (off-label use)	Twice daily as required
Scalp and beard	
Antifungal shampoos	
Ketoconazole shampoo 2%	Twice per week until condition is controlled, then 1 to 2 times weekly
Ketoconazole shampoo 1%	Can be used for maintenance
Other shampoo and topical treatments	
Selenium sulphide	See individual product information
Zinc pyrithione	See individual product information
Coal tar	See individual product information
Salicylic acid	See individual product information
Topical corticosteroids	
Hydrocortisone 1%	Daily for 1 to 2 weeks as required
Desonide lotion 0.05%	Daily for 1 to 2 weeks as required
Mometasone furoate 0.1%	For severe scalp involvement and itch, use daily until symptoms are controlled
Clobetasol propionate foam 0.05% (off-label use)	For severe scalp involvement and itch, use daily until symptoms are controlled

Systemic therapy

Oral fluconazole (off-label use), itraconazole and terbinafine (off-label use) have been used to treat moderate-to-severe seborrhoeic dermatitis.[5] A recent retrospective review of 46 patients who were treated with low-dose isotretinoin (off-label use) after conventional treatments had failed showed impressive responses to treatment. Clearance of the condition or an excellent response were reported in 41 (89%) of the treated patients.[6]

Conclusion

Janet's reported symptoms appear mild. Once other conditions are excluded by history and examination she should be counselled about the chronic nature of seborrhoeic dermatitis.

After lifestyle factors have been discussed, basic skin care advice should be given, starting with recommending a gentle nonsoap cleanser and emollients. If treating Janet, I would expect her to respond to ketoconazole 2% shampoo used twice weekly as required. I advise patients to use the shampoo as a face and body wash by lathering and leaving it on for a few minutes in the shower.

Additionally, the patient may use topical creams including ketoconazole cream or another azole cream, with or without a mild topical corticosteroid (e.g. hydrocortisone). The corticosteroid cream should be applied twice daily for one to two weeks when there is a flare-up not responding to the shampoo.

If the patient fails to respond to these measures, consider whether there might be an underlying systemic illness predisposing them to seborrhoeic dermatitis, such as HIV, neurological illness or a systemic illness. Treatment with systemic antifungals or isotretinoin may also be considered in moderate-to-severe disease when topical therapies fail; however, these require monitoring for safety in most cases. MT

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