

## DISEASES OF THE SKIN AND THEIR TREATMENT

**(2) ROSACEA**By *Bill Cunliffe, FRCP*

*This second article in our series on skin diseases and their treatment describes the clinical features of rosacea, and the pharmacist's role in its management*

**R**osacea occurs less frequently than acne and less is also known about its aetiology. The condition typically present in patients between the ages of 30 and 40 years, but it can present in a younger or older age group. The patient complains of either flushing of the face or acne-like spots, particularly in the form of red papules or pustules. Not infrequently, the two features — telangiectatic flushing and acneiform eruption — can occur in the same patient. Females are more likely to develop the disease than males, and the disease is more common in auburn-haired individuals, especially of Celtic origin.

**CLINICAL FEATURES**

The telangiectatic or flushing variety is made worse as a result of environmental situations, which would normally trigger flushing (Figure 1). Factors that can trigger the flushing are emotional stress, hot drinks and alcohol, which would naturally precipitate flushing in predisposed individuals without rosacea. There is no obvious trigger for the development of the inflammatory papules and pustules (Figure 2). The flushing event itself is self-perpetuating in that the embarrassment associated with flushing makes the patient more concerned about the problem and can therefore compound it, especially in individuals who may be anxious to begin with and who are concerned about the physical appearance of the skin disorder.

Examination of the skin will reveal that the lesions occur predominantly almost exclusively on the face, especially the forehead and cheeks. In the early phases of the telangiectatic variety, a magnifying lens may be necessary to see the small but obviously dilated skin blood vessels. As the disease becomes more obvious the dilated blood vessels may be easily seen without a lens and are recognised by the patient and even by an untrained observer. The larger blood vessels seem to occur particularly on the nose.

Consisting of papules and pustules, the inflammatory lesions are very similar to those seen in acne, occasionally with nodules and deep pustules. However, in contrast to acne, comedones and scarring do not occur.

Not infrequently, telangiectatic and inflammatory lesions occur in the same patient, and either may precede the other. There are also uncommon varieties, which include the additional feature in some patients of rhinophyma. In such patients the nose in particular is affected, becoming larger, bulbous and obvious to the individual and an observer, producing considerable cosmetic disfigurement (Figure 3).

Blepharconjunctivitis producing discomfort in the eye can occasionally occur, but the development of a significant keratitis associated with the rosacea is rare.

**DIFFERENTIAL DIAGNOSIS**

In order to make a diagnosis of rosacea, other conditions that can present with similar signs need to be excluded.

**Acne** In acne, the patient is usually younger although the condition can persist into the 30s and 40s. Comedones are a feature and scarring may occur. The patient has a seborrhoeic greasy skin and truncal lesions are common.



*Figure 1: The telangiectatic (flushing) variety of rosacea*



*Figure 2: Inflammatory papules and pustules are a feature of rosacea*

**Perioral dermatitis** Perioral dermatitis (Figure 4) typically occurs in the rosacea age-group. The lesions, as suggested from its description, occur particularly around the mouth. The papules tend to be monomorphic (ie, of a similar size) and a little itching may occur.

**Seborrhoeic eczema** Seborrhoeic eczema (Figure 5) tends to occur in atopic individuals where there is often a family or personal history of asthma and hay fever. The patient will present with cosmetically unacceptable, ill-defined redness (erythema) of the face, associated with some scaling and red papules. The lesions occur particularly on the forehead, cheeks and frequently the lesions are seen on the scalp and on the upper back and chest.

**Lupus erythematosus** A relatively uncommon differential diagnosis is lupus erythematosus, in which the non-itching, non-painful lesions occur on the cheeks. The individual lesions are superficial, well-defined plaques with some scaling and background redness.

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Figure 3: Rhinophyma

#### TREATMENT OF ROSACEA

The principles of treatment of rosacea are same as for other dermatoses. Pharmacists should be prepared to discuss the problem with the patient, including the consideration of topical, oral and physical treatments. Improvement of the inflammatory lesions is usually seen at about the fourth week of therapy.

It is important to stress to the patient that rosacea is not infectious, that the inflammatory lesions can normally be treated easily and that, because of recent developments in laser technology, the telangiectatic flushing element can also be reasonably well treated. There may be a need to travel to a laser centre. These can be found in a few (usually teaching) hospitals.

**Topical treatment** Several topical treatments can be prescribed, in particular topical metronidazole creams, occasionally gels, to be applied twice daily. Topical moisturisers can be helpful simply to soothe the skin in patients with the telangiectatic variety of the disease.

Side effects of topical therapy are not uncommon and include an irritant dermatitis, which may necessitate stopping the therapy.

**Oral therapy** The tetracycline group of treatments has been proven to be most successful. The dose can range from 500–1,000mg daily of oral tetracycline. Repeat courses can be prescribed. If required, oral minocycline, 100mg daily, can be prescribed, again for six months in non-responsive cases. Exceptionally, oral isotretinoin 0.5mg/kg/day gradually increasing to 1mg/kg/day can be prescribed. Antibiotics and isotretinoin only help the inflammatory form of the disease.

The side effects of tetracycline and oral isotretinoin are discussed in detail in the article on acne (*Pf*, November 24, p749), but it is worth the pharmacist stressing the uncommon side effects associated with minocycline, which include the risk of pigmentation, benign intracranial hypertension and a lupus erythematosus-like problem. Oral metronidazole may be associated with a disulfiram effect if taken with alcohol. With oral isotretinoin, mucocutaneous side effects are common, and this, of course, can aggravate an already sensitive skin. Pregnancy is completely contraindicated before, during and for six weeks after stopping isotretinoin therapy. It is also important to stress to the patient the uncommon adverse psychiatric risks of the drug, which can include mood changes and depression.

**Physical treatment** The telangiectatic variety of rosacea can respond well to pulse tunable laser therapy, which is available in selected centres spread throughout Britain. It is important to treat a small area of skin first. After the procedure, bruising typically occurs but scarring is an uncommon feature of the treatment. Rhinophyma



Figure 4: Perioral dermatitis



Figure 5: Seborrheic eczema

can be treated by dermabrasion, or by carbon dioxide laser therapy.

**Contraindications** The pharmacist should stress to the patient not to use any form of steroids in rosacea. Although topical steroids may initially seem to help, a severe flare is seen on stopping therapy.

#### THE PHARMACIST'S ROLE

The pharmacist has an important role in reaffirming the benign nature of rosacea, but at the same time relating to the patient the chronicity of the disease and giving information on how to use the therapy. In particular, it is necessary to stress the need to avoid taking tetracyclines with food, with milk, and with products containing calcium or iron. Furthermore, the pharmacist must stress the slow rate of improvement and the need to persevere with treatment for maybe up to six months to obtain an optimal response.

If the pharmacist is dispensing oral isotretinoin, pregnancy avoidance and psychiatric side effects need to be discussed in detail. Detailed advice needs also to be given on the regular use of moisturisers for the retinoid-induced dermatitis and the need for a good lip salve to minimise the cheilitis which is a frequent occurrence in patients taking oral isotretinoin. Furthermore, patients taking metronidazole need to be strongly reminded of the need to avoid alcohol.

Simple advice can also be given in those patients with telangiectatic rosacea to minimise consumption of hot drinks and alcohol. Some recent evidence suggests that drinking cool or iced water sometimes minimises the flushing (by affecting the baroreceptors in the neck), particularly if the patient is in a stressful situation or is desirous of a hot drink or alcohol.

## Correction

**Isotretinoin in acne** In last week's article on acne, under the section headed "Patient response" on p751, the dose for oral isotretinoin should have read 0.5–1mg/kg/day. The error has been corrected in the *Pf Online* version of the article.