# **Answer to Dermacase** continued from page 1157

### 4. Perioral dermatitis

Perioral dermatitis, a chronic acneiform eruption on the face, is thought to have an increased incidence in developed countries.1 Approximately 90% of those affected are adult women between 18 and 50 years old.2 The condition is rare in men and children.3 Patients often present with cosmetic concerns related to the skin eruption and occasional symptoms of burning, tightness, and less commonly, pruritus.

The clinical appearance of perioral dermatitis is described as groups of asymptomatic, occasionally scaly, skin-coloured, erythematous papules or papulopustules that predominantly surround the mouth (sparing the vermillion border of the lips), nasolabial area, medial cheeks, and less commonly, eyelid area.2-5 The term "periorificial" dermatitis refers to a condition in which several areas, such as the perioral, perinasal, and periocular areas, are affected.3

## Diagnosis

Perioral dermatitis is a clinical diagnosis based primarily on patient history and the morphology and distribution of lesions. Patients with topical corticosteroid-associated perioral dermatitis will note a cyclical pattern of improvement with steroid use and deterioration with steroid withdrawal.3 Additional laboratory testing is not required unless patients do not respond to appropriate therapy, and an alternative diagnosis is suspected.

# **Differential diagnosis**

The differential diagnosis of perioral dermatitis can include acne vulgaris, contact dermatitis, rosacea, seborrheic dermatitis, discoid lupus, and papular sarcoid,4 each of which has a unique clinical presentation. Rosacea often mimics the clinical and histologic appearance of perioral dermatitis.<sup>3,4</sup> Rosacea, however, can be distinguished by its occurrence in older people (older than 40), frequent flushing, erythema and telangiectasia, ocular involvement (eg, blepharitis, conjunctival hyperemia, keratitis, and iritis), and associated rhinophyma.2

The cause of perioral dermatitis usually cannot be identified, except in patients with recognized (or unintentional) exposure to topical corticosteroids.<sup>2,3,6</sup> Other proposed causative or aggravating factors include use of occlusive topical cosmetic products (eg, paraffin- or petrolatum-based creams or ointments, foundation creams, or sunscreen),1 contact allergens, microbiologic factors (eg, Candida, Demodex, or fusiform bacteria), tartar-control dental products, and ultraviolet light.<sup>2,4,7</sup> Hormonal factors can contribute to worsening of perioral dermatitis in women during the premenstrual period, during pregnancy, and when they are taking oral contraceptives.7

## Management

Management of perioral dermatitis involves identifying and eliminating the underlying cause, including discontinuing use of topical cosmetic products, and not applying corticosteroids to the face. 1,3,8 The treatment of choice for perioral dermatitis is a 6- to 12-week course of systemic tetracycline antibiotics, such as doxycycline, minocycline, or tetracycline.<sup>2,7,8</sup> Systemic erythromycin can be used as an alternative. For children younger than 12 years, pregnant women, and patients with contraindications to systemic tetracyclines, topical forms of metronidazole (most common),9 erythromycin, adapalene, or azelaic acid can be used. Success rates, however, are often much lower than they are with treatment with oral antibiotics.8

If the underlying cause of the condition is related to use of mid- to high-potency topical corticosteroids, low-potency corticosteroids, such as 1.0% hydrocortisone or topical pimecrolimus or tacrolimus, can be substituted to reduce the initial rebound flare associated with steroid withdrawal.3 Oral isotretinoin was used effectively in 1 patient who had severe granulomatous perioral dermatitis and was unresponsive to oral antibiotics. 10

Recurrence following treatment is not uncommon, particularly if the duration of systemic therapy is insufficient. Patients who have adequate treatment of perioral dermatitis have an excellent prognosis.2 Patients left untreated can experience fluctuating disease for months or years,3 and patients with severe cases of perioral dermatitis could be left with scars.

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### **Competing interests**

None declared

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