

## Perioral dermatitis

### What is perioral dermatitis?

Perioral dermatitis presents as an eruption of erythematous papules, pustules and papulovesicles, most frequently seen in women.<sup>[1]</sup> The aetiology of perioral dermatitis is unknown but it is associated with direct or indirect use of topical steroids for minor skin problems. Indirect use involves transfer to the face when steroids are being used elsewhere on the body. It is also associated with use of cosmetics, moisturisers and sunscreens. The name is misleading as it is not actually a dermatitis.<sup>[2]</sup>

### Epidemiology

- The incidence is estimated to be 0.5–1% in industrialised countries, possibly lower in less industrialised countries.<sup>[3]</sup> The incidence has decreased in recent years and this is likely to be due to greater awareness of the problems of prolonged use of topical steroids.
- Predominantly it affects women aged 20–45 years but can affect any age group, including children.<sup>[1]</sup>
- The number of male cases is increasing and this is assumed to be because of changes in their use of cosmetics.

### Aetiology of perioral dermatitis

An underlying cause cannot be detected in all patients. The aetiology of perioral dermatitis is unknown. Apparent causes include:

- Topical steroid preparations. No clear correlation exists between the risk of perioral dermatitis and also the strength of the steroid or duration of use. It has been reported in relation to the use of nasal or inhaled steroids.
- Cosmetics.

- High-factor sun protection creams (association seen in children).<sup>[4]</sup>
- Fluoridated toothpaste.
- Physical factors: ultraviolet (UV) light, heat and wind worsen perioral dermatitis.
- Candidiasis has been suggested as a provoking factor.
- Miscellaneous: hormonal factors are suspected because there may be a premenstrual deterioration. Oral contraceptives may also be a factor.

## Symptoms of perioral dermatitis

- Skin lesions occur as grouped follicular reddish papules, vesicles and pustules on an erythematous base around the mouth, nasolabial folds and the cheeks.
- A pale area adjacent to the border of the mouth is characteristic (sparing of the lip margins).
- Occasionally, the eruption can be more widespread, when the eyelids and forehead are also affected.
- There is often a sensation of burning and tension; itching is, however, rare.
- Lupoid perioral dermatitis is a severe variant of the disease with yellowish granulomatous infiltrates.
- Facial flushing and telangiectasia are not features of perioral dermatitis (but are seen in rosacea).<sup>[2]</sup>

## Differential diagnosis

- [Rosacea](#)
- [Acne vulgaris](#)
- [Contact dermatitis](#)

## Perioral dermatitis management

- Patients initially need an evaluation of any underlying factors.

- Reassurance and education about possible underlying factors and the time course of the disease. Washing hands after application of a steroid cream elsewhere may be important.
- Substances that dilate skin blood vessels – eg, alcohol and spicy foods – should be avoided.
- Cosmetics, cleansers and moisturisers should be avoided during treatment.<sup>[5]</sup>
- A topical antibiotic (eg, clindamycin or erythromycin) can be used for milder cases. Otherwise, a systemic antibiotic should be used for 4–6 weeks (eg, doxycycline 100 mg daily or lymecycline 408 mg once daily).<sup>[2]</sup> Modified-release doxycycline capsules 40 mg daily have also been found to be helpful but are not listed in the guidelines reference in this article.<sup>[6]</sup>
- In unresponsive and granulomatous forms, oral isotretinoin may be considered.
- Pimecrolimus cream has been shown to be effective and is an option when other treatment options have failed.<sup>[1]</sup>
- Photodynamic therapy has been reported to be effective but there are currently no large studies to evaluate this treatment.
- An initial worsening of the symptoms may occur with treatment, especially if topical steroids are withdrawn. In cases of preceding long-term misuse of topical steroids, gradual steroid withdrawal with low-dose 0.1–0.5% hydrocortisone cream can be tried initially.

## Complications

- Emotional complications may develop because of the nature and chronic course of the disease. Patients may have marked lifestyle restrictions due to the disfiguring facial lesions.
- Scarring may be a problem with the lupoid form of perioral dermatitis.

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## Further reading

- [Maeda A, Ishiguro N, Kawashima M](#); The pathogenetic role of rod-shaped bacteria containing intracellular granules in the vellus hairs of a patient with perioral dermatitis: A comparison with perioral corticosteroid-induced rosacea. *Australas J Dermatol.* 2016 Aug;57(3):225–8. doi: 10.1111/ajd.12344. Epub 2015 Apr 20.

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