

## CosmoDerma



**Editorial** 

## Challenges in the management of rosacea

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Rosacea is one of the most important centrofacial dermatosis with a global prevalence of 5.5% of the adult population with increasing incidence by aging. While the disease is more frequent among Caucasians, it might be underdiagnosed in patients of ethnic skin. Some years ago, we collected data from Nigeria, South Africa, Namibia, and India. Rosacea is international!

The clinical features include flushing and persistent erythema, telangiectasia, inflammatory papules and pustules, and phymatous, fibrotic changes. The most important extracutaneous manifestation is ocular involvement.

The pathogenesis is not completely understood but impairment of skin barrier function, involvement of innate and adaptive immune functions, and neurocutaneous circuits are considered of importance.

Treatment has much improved in recent years, but those who are affected by the disease need patience. Inflammatory rosacea lesions do not respond as fast as acne lesions.

The challenges in rosacea treatment in India start with diagnosis. It is much easier in paleskinned Northern Europeans, where it is a visual diagnosis even from a distance. Recognition of erythema and subtle phymatous changes need a closer look at darker skin types.

Rosacea is not acne. The term acne rosacea is a misnomer. Rosacea needs a tailored treatment different from acne. Perioral dermatitis, demodicosis, and sarcoidosis are some differential diagnoses of rosacea.

The primary clinical symptoms are flushing of transient erythema and persistent erythema. Brimonidine and oxymetazoline gels are capable of reducing the redness by constriction of cutaneous vessels, but the effect is temporary, there are non-responders, and overuse may aggravate the symptoms. There are unmet needs of rosacea patients with erythematous disease.

Papulopustular inflammatory rosacea can be very stigmatizing. Topical compounds such as metronidazole, azelaic acid, and ivermectin are helpful but not fast acting. Their potential to prevent phymatous changes is rather limited. Nevertheless, topical metronidazole is the treatment of first choice.

In more advanced cases or patients with ocular involvement, systemic treatment is warranted. A very safe and effective therapy is low-dose slow-releasing doxycycline. Isotretinoin is an alternative, but less tolerable. Since it is teratogenic, strict contraception in women is necessary during child-bearing age. Sun protection is also recommended for both systemic drugs.

Stinging and burning sensations are commonly reported by the patients, who may develop intolerance to skin care products as well. This could also be a hint for neurogenic rosacea.

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There is no medical treatment available for telangiectasia and phymatous changes. Intense pulsed light (IPL) devices and lasers are used in pale skin types, but IPL bears a higher risk of hyperpigmentation in ethnic skin. Vascular lasers are effective and more expensive. Diode laser or dual diode lasers are very helpful for couperose (red nose) and centrofacial telangiectasias.

More pronounced phymatous changes like rhinophyma will benefit from surgical reshaping, either by cold steel, laser or electro-/radiosurgery. It is important to be moderate with tissue removal; otherwise, the nose can develop unsightly extensive scarring. Rhinophyma may be associated with cutaneous malignancies such as basal cell carcinoma and angiosarcoma. A biopsy is necessary in suspicious cases.

Combined treatments are often more satisfying for all stages of rosacea. Slow-release doxycycline with topical metronidazole and topical brimonidine with topical metronidazole or topical ivermectin have provided a better outcome than single components.

There are new treatment options on the horizon. Minocycline foam and gel for topical use, low-dose minocycline with slow release, oral rifaximin, and calcitonin gene-related peptide inhibitor erenumab are some examples. Hopefully, these new products will improve the outcome of rosea patients.

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