

Rhinophyma is commonly linked to chronic alcohol use, colloquially being misnamed 'whisky nose' or 'rum blossom'. However, the true reason for this disfiguring condition has no clear causative trigger.

Some studies have linked rhinophyma with sudden emotional responses that trigger flushing.<sup>1</sup> Rhinophyma is a benign dermatological condition of the nose, derived from the Greek word 'rhis' for nose and 'phyma' for growth. It is the end-stage presentation of phymatous rosacea, and may occur in patients with few or no other features of rosacea.

Although recognised by Greek and Arabian physicians as early as 2000 BCE,<sup>2</sup> it may have easily been confused with tuberous conditions of the nose such as leprosy, syphilis, and tuberculosis. First accurately described by Virchow in 1846, it can result in significant facial disfigurement, emotional suffering, and even serious ocular complications.

#### PATHOPHYSIOLOGY

Rhinophyma, also termed 'end-stage rosacea', is the most frequent phymatous manifestation of the disease. It starts as an accentuation of the normal tissue over the nose in adolescence and young adulthood. This is followed by progressive dilation of the nasal vessels, involvement of cysts and pustules resulting in oily skin, and significant hypertrophy and hyperplasia of the sebaceous glands and connective tissue of the nasal tip.

As the condition progresses pits, nodules, lobulations, fissures, and pedunculations conceal the normal contour of the nose leading to the unpleasant disfigurement. Nasal involvement can be localised or generalised, but most commonly affects the lower two-thirds and the nasal tip. There is no uniformity within the final appearance of the nose and the condition can spread to the chin (omentophyma) or the ear (otophyma).<sup>3</sup>

#### AETIOLOGY

Although rosacea is commoner in females, the incidence of rhinophyma is higher in males. Rhinophyma typically afflicts white males between the age of 40 and 60 years, and is more common in men with English or Irish descent.

Numerous exacerbating factors have been reported to trigger rosacea such as extreme emotional states, sun exposure, and cold weather. Drugs such as vasodilators,

ACE inhibitors, and simvastatins have been reported as aggravating factors of rosacea,<sup>4</sup> and studies have found possible associations between rosacea and the face mite *Demodex folliculorum*<sup>5</sup> and *H. pylori*.<sup>6</sup>

#### MANAGEMENT

Patients are often referred to ENT surgeons due to the emotional upset caused by the disfigurement. They often have feelings of low self-esteem, embarrassment, or anxiety about their facial disfigurement and flushing. The resulting nasal hypertrophy may even be severe enough to cause visual impairment, nasal obstruction, or sleep apnoea.<sup>7</sup>

The diagnosis of rhinophyma is generally made on a clinical basis; however, a biopsy may be necessary to exclude other conditions such as: lupus pernio (sarcoidosis of the nose); basal cell carcinoma; squamous cell carcinoma; angiosarcoma; and nasal lymphoma.

#### TREATMENT

It is essential to fully understand the patient's concerns and consider the emotional impact of the condition on the patient. Attention must be given towards systemic treatment of rosacea and avoiding trigger factors to achieve symptoms control.

#### MEDICAL OPTIONS

The early stages of rhinophyma may respond to topical treatments such as metronidazole, azelaic acid, and topical retinoids, and oral antibiotics such as tetracycline, doxycycline, and metronidazole can also be used. More severe cases should be referred to a specialist, who may consider using topical ivermectin and brimonidine, or oral isotretinoin.

Topical steroids should be avoided as they can exacerbate symptoms.<sup>8</sup> However, once the disease progresses to its hypertrophic and bulbous stage only surgical intervention can reverse the deformity.

#### SURGICAL OPTIONS

Several surgical techniques have been described in the management of rhinophyma. The main principle is shaving the redundant tissue while avoiding damage to the underlying cartilage. The depth of shaving should leave enough skin adnexal structures at the wound surface to allow proper healing by secondary intention.

Surgical techniques include: dermabrasion;

CO<sub>2</sub> laser shaving; cryosurgery; harmonic scalpel; and YAG laser.

#### CONCLUSIONS

The prognosis of rhinophyma is variable, and patients should be aware of the pathophysiology of the condition and its link to the underlying rosacea. Although this is a dramatic and distressing variant of rosacea, the condition is treatable, and with supportive management of patients' emotional and clinical needs every day need not be Red Nose Day.

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DOI: <https://doi.org/10.3399/bjgp19X701585>

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