



ROSACEA

Top tips for MURs

- Check adherence to rosacea treatment
- Explain to the patient that the condition is progressive – but progression to severe disease and rhinophyma is very uncommon (especially in women)
- Explain that rosacea is not related to poor hygiene
- Advise that local preparations such as metronidazole and azelaic acid take around 8 weeks to exert an effect
- Review other medications as certain medications may exacerbate rosacea such as calcium channel blockers or topical corticosteroids
- Counsel patients on signs/symptoms that need referral and common side effects (**see overleaf**)
- Advise patients taking oral antibiotics on food status. Tetracycline and oxytetracycline should be taken on an empty stomach (milk and antacids should be avoided). Doxycycline and lymecycline may be taken with food
- Advise patients that tetracyclines can be associated with photosensitivity reactions especially in hypersensitive individuals – suncream should be worn (minimum SPF 30) and sunlamps avoided
- Report any relevant adverse drug reactions to the Yellow Card Scheme
- Signpost patients to further information, for example the British Association of Dermatologists

Pathophysiology of Rosacea^{1,2}

Rosacea is a chronic inflammatory skin condition which predominantly occurs in women aged between 40 and 60 years. It is characterised by facial flushing, papules and erythema affecting the cheeks, nose, chin and forehead. There may be inflammation of the eye and eye lid (ocular rosacea). Rosacea may progress to a severe form (phymatous rosacea), which is characterised by thickening of the skin, nodularities and enlargement of the nose (rhinophyma) or other parts of the face. Although the cause remains unclear, demodex mites have been implicated as a contributing factor.

How do drugs used to treat rosacea work³?

Topical metronidazole	Complex and not fully understood; antioxidant activity affects neutrophil cell function which reduces inflammation, also direct toxic activity on demodex mites.
Oral antibiotics	Antibacterial and anti-inflammatory action; there is a reduction in the concentration of fatty acids in sebum, reducing inflammatory lesions.
Brimonidine gel	An alpha - 2 - adrenergic receptor agonist with potent vasoconstrictive activity, reducing flushing and erythema.
Topical azelaic acid	Complex and not fully understood; elevation of several pro-inflammatory effector molecules and reactive oxygen species reduces inflammation.

Lifestyle issues

- Counsel patient on reducing alcohol intake to within safe limits (up to 14 units a week, spread evenly over 3 or more days)
- Counsel patient on healthy eating, exercise & weight loss (if BMI > 25kg/m²)
- Reduce saturated fat and salt intake, avoid salt substitutes, increase oily fish intake
- Complete 30 minutes of aerobic exercise three to five times a week
- Reduce caffeine intake to no more than 5 cups a day and recommend 5 portions of fruit and vegetables a day
- Advise patients who smoke of the benefits of stopping smoking and how to access pharmacy smoking cessation services or Stop Smoking Wales





Common side effects^{2,3}

Drug	Common side effects	Recommendation
Topical metronidazole, topical azelaic acid	Skin irritation (burning, stinging, itching, dryness), less commonly skin discolouration	Consider an alternative formulation, topical metronidazole is less likely to cause adverse effects than azelaic acid, metronidazole cream may be more suitable for sensitive skin than gel. Reduce frequency of application.
Oral antibiotics	Nausea, diarrhoea, vomiting, yeast infections, photosensitivity (seen with oral antibiotics) oesophagitis (seen with tetracycline)	Certain preparations e.g. doxycycline/ lymecycline can be taken with food or milk which may improve tolerance. Tetracycline should be swallowed whole in an upright position with plenty of water. Limit exposure to sun or sun-lamps and stop taking if photosensitivity (erythema) occurs.
Brimonidine gel	Itching, burning sensation, dry skin Less commonly: dry mouth, headache, paraesthesia	Refer to prescriber if troublesome.

Self-care advice to patients: Rosacea^{1,2}

- Identify and limit aggravating factors, these include certain drinks and foods (alcohol, caffeine, cheese, spicy food), extremes of temperature, stress, and strenuous exercise. A written record of flare-ups may help in managing the condition
- Advise patient that sometimes sucking on an ice cube may help with redness and flushing
- Advise the frequent use of high-factor sunscreen to the face (minimum SPF 30)
- Advise the patient not to scrub or rub the face as this can exacerbate rosacea
- Advise patient to avoid perfumed soap and instead use an emollient soap substitute
- Advise the patient on eye-lid hygiene if they have ocular rosacea – artificial tears or lubricants may benefit dry eyes
- If the skin is dry recommend the use of hypoallergenic fragrance free emollient
- If erythema is persistent, signpost to the changing faces skin camouflage service www.changingfaces.org.uk/skin-camouflage

Red flags that need referral^{1,2}

- Rosacea fulminans – symptoms of multiple erythematous papules, pustules, nodules and purulent discharging cysts
- Rosacea that has not responded to lifestyle or prescribed treatments
- Symptoms of fever, myalgia and systemic infection
- Patients with psychosocial problems or symptoms of depression
- Ocular symptoms and complications – blepharitis, conjunctivitis, meibomian cysts, keratitis (eye pain, blurred vision, sensitivity to light)
- Worsening of asthma with azelaic acid
- Prominent rhinophyma

Potential serious drug interactions?

Oral tetracyclines may interact with other medications, for example retinoids and anticoagulants; **see BNF Appendix 1 for more information**

Where can you find more information?

- NICE Clinical Knowledge Summary; Rosacea – acne <http://cks.nice.org.uk/rosacea-acne>
- British Association of Dermatologists; Rosacea patient information leaflet
- Summary of product characteristics: Metrosa® 0.75% gel, tetracycline 250mg tablets, Finacea® 15% gel, Mirvaso® 3mg/g gel
- BNF 13.7.2 Rosacea

