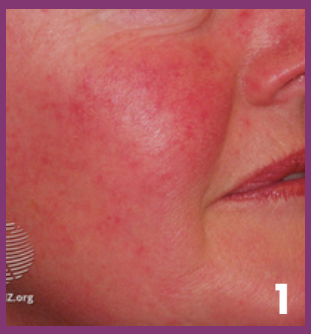
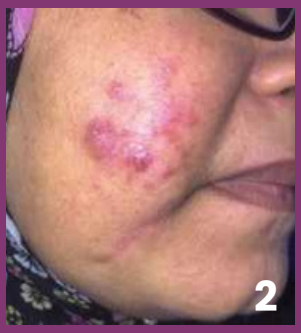
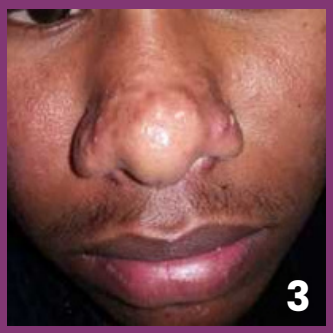
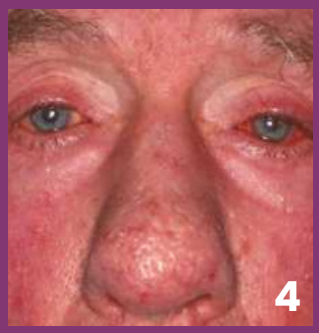
Rosacea

	 1	 2	 3	 4
Disease	Erythemato-telangiectatic Rosacea (ETR)	Inflammatory Rosacea (Papulopustular)	Phymatous Rosacea	Ocular Rosacea
Presentation	Persistent facial erythema. Telangiectasia: Blood vessels underneath the skin become dilated and visible.	"Whitehead" pustules, which are small, inflamed, pus-filled blister-like sores/lesions on the skin surface.	Skin thickens and scars, leading to irregular surface nodularities, swelling, and sometimes discoloUration.	Blepharitis and conjunctival hyperaemia, resulting in the appearance of red eyes and persistent dryness, sensitivity, and cyst formation on the eyelids. Patients may also experience burning or irritation in the eyes Eyelids, conjunctiva, and cornea.
Location	Typically appears on the face; commonly around the nose and cheeks. However, it can present on the forehead, scalp, neck, and chin.	Typically appears on the cheeks, chin, and forehead; frequently misidentified as acne.	Often affects the nose, resulting in what is sometimes called a bulbous nose, or rhinophyma.	Eyelids, conjunctiva, and cornea.
Comorbidities	Rosacea has been associated with depression, hypertension, cardiovascular disease, anxiety disorder, dyslipidemia, diabetes mellitus, migraines, rheumatoid arthritis, Helicobacter pylori infection, ulcerative colitis, and dementia.			
Onset	Rosacea typically presents after the age of 30 and more commonly affects patients with fairer skin. However, this condition may be underdiagnosed in patients with skin of colour. This disparity may stem from a multitude of factors, including limited exposure during dermatology training to skin pathologies in darker phototypes, as well as socioeconomic factors underpinning barriers to accessing care.			

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Rosacea Continued

Disease	Erythemato-telangiectatic Rosacea (ETR)	Inflammatory Rosacea (Papulopustular)	Phymatous Rosacea	Ocular Rosacea
Causes	The exact etiology of rosacea is unknown. It is an inflammatory disorder caused by many underlying internal and external factors. Research has explored the pathophysiological role of genetics, skin mites, immune-system hyperactivity, gastrointestinal infection to H. pylori, and excess cathelicidin production. Common triggers that contribute to worsening of symptoms and flare-ups: • Emotional stress and anxiety • Spicy foods • Alcohol • Hot beverages • Extreme heat (weather, hot baths and showers, saunas, etc.) • Extreme cold • Strong winds • UV rays • Physical exertion • Foods high in histamines			
Treatments	Avoid triggers including sun exposure. Use gentle-skin care products (eg, gentle cleansers, mineral sunscreen, avoid exfoliants, etc.).			
	Topicals (mild/moderate symptoms): Metronidazole, Azelaic acid, Brimonidine (monotherapy or in combination). **Laser (for telangiectasia):** Intense pulsed light therapy Vascular laser. **Oral (for flushing):** bBta-blockers (carvedilol) clonidine may reduce flushing	**Topicals (mild/moderate symptoms):** Metronidazole, Azelaic acid, ivermectin, erythromycin. **Oral (severe):** Tetracyclines (oxytetracycline, lymecycline, doxycycline) macrolides (erythromycin, azithromycin), metronidazole, isotretinoin often at low dose (for refractory disease only).	**Physical (If clinically non-inflamed)**: Physical modalities to remove excess tissue and reshape the structures (eg, ablative CO2 laser, erbium laser, radiofrequency, surgical debulking). **Oral (if clinically inflamed)**: Doxycycline, isotretinoin.	**Topical (mild/moderate):** Azithromycin/topical calcineurin inhibitors. **Oral (severe):** **A**zithromycin, doxycycline. **General:** Increase dietary intake of omega-3 fatty acids, warm compresses, gentle eyelash/eyelid cleansing to express sebum trapped in the meibomian glands.

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Image Citations

1. *Rosacea images*. DermNet. (n.d.). https://dermnetnz.org/images/rosacea-images

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