UNIVERSITY STUDENT HEALTH SERVICES • Fact Sheet

ROSACEA

WHAT IS IT?

Rosacea is a poorly understood, chronic skin condition that affects the face. It commonly causes redness and pimples on "blush" areas, such as the nose, cheeks, chin, and forehead. It can also affect the ears, chest, and back. If symptoms involve the eyes, treatment by an ophthalmologist is necessary to prevent complications.

HOW COMMON IS IT?

Rosacea affects over 14 million Americans, mostly adults aged 30-50.

- It is more common in women but tends to be more severe in men.
- Rosacea can occur in people of any skin color. However, those who are fair-skinned are more likely to be affected. Persons of Celtic, Scandinavian, or Northern European descent have a greater incidence of the disease.

WHAT CAUSES IT?

The exact cause of rosacea is unknown. Research is ongoing. The underlying problem seems to involve abnormal swelling of the small blood vessels of the face, which leads to frequent flushing or blushing. Suspected causes include:

- Immune dysfunction involving peptides in the skin.
- Infestation with microscopic mites found in hair follicles: *Demodex* mites can be found on normal skin, but increased numbers have been reported in patients with rosacea.
- Various bacteria: Some have been linked to rosacea, though a causal relationship is still unclear. Other studies point to a disturbance in the microbiome as a whole.
- Genetics: A family history of rosacea can increase the risk of developing symptoms.

WHAT ARE THE SYMPTOMS?

Rosacea symptoms are typically limited to the face and may be constant or intermittent. Symptoms often last years and can be lifelong. Common symptoms include:

- Frequent flushing to constant redness in the central portion of the face.
- Dry, sensitive, and/or flaky skin. The skin can sting and burn.
- Dilated blood vessels visible under the surface of the skin, called telangiectasias.
- Red bumps (papules) and pustules on the face.

Other symptoms may include:

- Dry, red, burning, itchy, or "gritty" eyes in up to 72% of patients. Redness of the eyelids, tearing, sensitivity to light, and blurred vision may also occur.
- Severe thickening of the skin, known as phymatous rosacea. This condition is rare but can occur in advanced stages of disease. In men, the nose can become very large and red. Other areas of the face may also be affected.

WHAT CAN TRIGGER SYMPTOMS?

A variety of factors are known to trigger rosacea flares:

- Sun exposure.
- Changes in the weather, like extremes in temperature, strong winds, or a change in humidity.
- Strenuous exercise.
- Alcohol, nicotine, hot beverages, and spicy foods.
- Emotional factors, such as stress, fear, anger, anxiety, etc.
- Facial skin products or certain oral medications, like vasodilators.

HOW IS IT DIAGNOSED?

The diagnosis of rosacea is based upon your symptoms and physical exam findings. Skin biopsies are nonspecific and rarely indicated.

WHAT IS THE TREATMENT?

There is no cure for rosacea, but early diagnosis and treatment can control symptoms and may stop rosacea from progressing. Regular treatment leads to fewer flares and less severe disease.

❖ GENERAL SKIN CARE

- **The first step is to avoid triggers**. If needed, keep a symptom diary to identify triggers. For example, if extreme cold is an issue, protect your face by wearing a scarf or ski mask.
- **Gentle skin care** will help decrease redness and skin sensitivity. Choose "noncomedogenic" facial products as they are less likely to cause acne.
  - Wash your face at least once a day with a gentle cleanser and lukewarm water. Avoid overwashing, abrasive washcloths, and scrubs. Also avoid harsh products, like astringents, toners, and exfoliants (products containing alpha-hydroxy) on your face.
  - Use a hypoallergenic facial moisturizer daily. Many are combined with sunscreen.
- **Daily sun protection** is recommended. Choose a sunscreen labeled "broad-spectrum" with at least an SPF of 30. Avoid sunscreens that are alcohol-based as they are more likely to cause irritation. Apply the sunscreen 15 minutes after using other topical treatments. Also avoid mid-day sun exposure.
- If you wear make-up, a flesh-colored foundation applied on top of a **green-tinted foundation** can help camouflage redness in the skin.

❖ TREATING REDNESS, FLUSHING, & TELANGIECTASIAS

If symptoms do not improve with the behavioral changes recommended above, effective treatment options are available:

- **Topical medications** used to treat redness include brimonidine (Mirvaso) gel, which has the strongest evidence for efficacy, and oxymetazoline (Rhofade), which has modest benefits. Anti-inflammatory topical treatments (see below) may also help control redness, but they are most effective in the treatment of bumps and pustules.
- **Laser and intense pulsed light therapy** are also effective in decreasing redness. They are the treatments of choice for noticeable blood vessels (telangiectasias) on the face, neck, and chest. Repeat treatments are usually necessary.

❖ TREATING BUMPS & PUSTULES

- **Anti-inflammatory topical medications** are used to treat mild to moderate papulopustular rosacea. These are the preferred agents for maintenance therapy. It can take a few months to see improvement.
  - First-line options include metronidazole (Flagyl) cream/gel, azelaic acid (Finacea) cream/gel, and ivermectin (Soolantra) cream. Metronidazole and ivermectin are preferred in patients with significant facial sensitivity.
  - Sulfacetamide-sulfur, benzoyl peroxide and other topical antibiotics (erythromycin, clindamycin, minocycline), retinoids (Differin), and permethrin, a topical antiparasitic agent, are options in patients who fail to respond to or cannot tolerate first-line therapies.
- **Low-dose oral antibiotics** are used for their anti-inflammatory effects to treat moderate to severe papulopustular disease.
  - The tetracyclines (doxycycline, minocycline) are the best-studied and most commonly used oral antibiotics for rosacea. They are typically prescribed for 4-12 weeks. Other antibiotic options are available for patients who cannot take a tetracycline.
  - Oral antibiotics tend to work faster than topical treatments. Once symptoms are controlled, many patients are switched to a topical anti-inflammatory agent. A short course of oral antibiotics may be restarted for flares.
  - If needed, very low-dose doxycycline can be considered for maintenance therapy.
- **Isotretinoin** is an oral medication reserved for severe cases and is only available through a dermatologist. Close follow-up and regular blood tests are required due to the risk of serious side effects.

❖ TREATING OCULAR ROSACEA

Symptoms involving the eye must be evaluated by an ophthalmologist to avoid damage to the cornea and loss of vision.

RECOMMENDED WEBSITES: www.rosacea.org, www.aad.org, www.niams.nih.gov