In medicine, the condition characterized by flushing of the face and the formation of red papules (hard pimples) is known as rosacea. Initially, the flushing is exacerbated by sunlight, large meals, or excessive consumption of alcohol. Progress of the disease results in enlargement of the sebaceous glands and the redness becoming permanent. The nose may become very enlarged in severe cases. Rosacea is treated with long courses of tetracycline antibiotics or by the application of metronidazole gel to the face.

Rosacea is a disorder that involves the blood vessels, leads to formation of acne-like lesions, and growth of certain glands. The vessels of the central face, including the nose, cheek, eyelids, and forehead, dilate, causing redness. Initially, patients with rosacea have a tendency to flush easily and this can progress to persistent redness. Certain foods, beverages, and changes in mood or temperature may exacerbate the redness. Later, small blood vessels (telangiectasias) and tiny pimples begin to appear on and around the reddened area. Rosacea can sometimes be confused with acne vulgaris; however, in rosacea, there are no blackheads present as in acne. A rhinophyma may form in advanced cases of rosacea due to enlargement of the glands, causing a bulbous, enlarged red nose and puffy cheeks. Rosacea may also involve the eyes 50 percent of the time. Patients may experience conjunctivitis, which is a burning and grittiness of the eyes. Rosacea is a chronic disorder that is best prevented by avoiding irritants and triggers. To avoid further breakouts and progression, the patient must adhere to a pharmacologic regimen for maintenance therapy.

Those most likely at risk for rosacea are between the ages of 30 and 60 who have fair skin, light hair, and light eye color. Females experience this disorder more frequently than males. Males are more likely to have advanced cases that will lead to rhinophyma.

The etiology of the vessel dilation in rosacea has not yet been ascertained, but some studies have theorized that hair follicle mites—Demodex folliculorum and Demodex brevis—may cause the inflammatory lesions. Some studies show that people with rosacea have more mites in their skin versus the skin of patients who do not have rosacea.

Patients with rosacea have increased susceptibility to facial flushing, often provoked by hot drinks, spicy foods, caffeine, and alcoholic beverages. Other aggravating events include extreme temperatures, emotional reactions, rubbing the face, and using irritating cosmetics/facial products. The flushing may cause some embarrassment in social settings, and patients may often be told that they have "rosy cheeks."

The first stage of rosacea is characterized by facial erythema and telangiectasias. The patient can progress to the second stage, characterized by sebaceous gland growth that leads to papules, pustules, cysts, and nodules. These inflammatory lesions are similar to the ones seen in acne vulgaris.
with the exception of a lack of comedones (blackheads). Also, patients with acne usually lack
telangiectasias. The patient may also experience burning and stinging sensations of the face. In the
advanced stages, there is involvement of the eyes and rhinophyma.

Classification of rosacea can aid in treatment. The erythematotelangiectatic subtype is characterized
by facial reddening, and also associated with stinging and burning symptoms. The papulopustular
subtype is the classic presentation, and is characterized by small papules and pustules, with redness of
the middle part of the face.

The area around the eyes and mouth are usually not affected. The glandular subtype presents with
enlargement of the sebaceous glands. The papulopustular and the glandular can progress to a
phymatous subtype, which causes the skin to form nodules and become thick. The final subtype is
ocular rosacea, and is characterized by irritation and inflammation of the eyelids (blepharitis) as well as
conjunctivitis. This may be confused for a bacterial infection or chemical irritation of the eyes.

There is no treatment for rosacea; hence, patients must be educated on the need to control this
chronic disorder. Facial erythema is more difficult to treat than inflammatory and ocular lesions.
Telangiectasias are treatable with surgery or pulsed laser therapy. Patients with rhinophyma may need
surgical correction for a satisfactory result. Patients may be unfairly mistaken for alcoholics, due to their
red facial features.

Initial therapy includes patient education, avoidance of irritants, and the use of sunscreens. Topical
antibiotics and benzoyl peroxide help relieve the inflammatory lesions. For inflammatory lesions of
rosacea, topical metronidazole with or without a short course of antibiotics is used. Tetracycline should
be used when metronidazole does not help. For rosacea not improving with the above measures,
isotretinoin may be of benefit. Steroids should not be used, as they may increase erythema with long-
term use. There is no specific therapy for the flushing in rosacea patients, but it may help patients to
avoid things that trigger the redness. Rosacea is chronic, and patients may have lifelong disease, but
the symptoms should be able to be controlled properly.

SEE ALSO:
Dermatitis; Skin Diseases (General).

BIBLIOGRAPHY

Gautam J. Desai, D.O.
Amber Sturzenegger
Kansas City University
Aisha Ahmad, D.O.
St. Joseph Mercy of Macomb

APA
Chicago
Harvard