



Approved Provider

## **ROSACEA—Signs, Symptoms and Subtypes**

COA#PCIA0709

*CE Activity provided by PCI Journal*

### **INSTRUCTIONS**

1. Read the article.
2. Take the test, record your answers in the test answer section (Section B) on CE Registration Form.
3. Complete the CE Registration information (Section A) and Course Evaluation (Section C).
4. Mail completed CE Registration Form and fee to: PCI Journal, 484 Spring Avenue, Ridgewood, NJ 07450-4624.
5. This CE activity is approved through July 1, 2017.

### **PROVIDER ACCREDITATION**

*Paramedical Consultants, Inc.*, publishers of the PCI Journal and WWU have been approved by the NCEA COA. This educational activity has been approved for 1.0 CE – COA#PCIA0709

### **GENERAL PURPOSE STATEMENT**

To provide the skin care professional with a review of *Rosacea—Signs, Symptoms and Subtypes*.

### **LEARNING OBJECTIVES**

After reading this article and taking this test, the skin care professional will be able to:

1. Describe the signs and symptoms of rosacea.
2. Outline and understand the subtype classification system.

## **ROSACEA—Signs, Symptoms and Subtypes**

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Rosacea, (pronounced "roh-ZAY-sha") a chronic cutaneous disorder that is potentially life-disruptive for an estimated 14 million Americans. Rosacea can vary substantially from one individual to another, and in most cases some, rather than all of the potential signs and symptoms appear. Based on present knowledge, it is considered a syndrome, or typology, encompassing various combinations of cutaneous signs. Rosacea always includes at least one of the following primary signs, and various secondary signs and symptoms that may also develop.

### **Primary Signs of Rosacea**

#### **Flushing**

Many people with rosacea have a history of frequent blushing or flushing. This facial redness may come and go, and is often the earliest sign of the disorder.

#### **Persistent Erythema**

Persistent facial redness is the most common individual sign of rosacea, and may resemble a blush or sunburn that does not go away.

#### **Papules and Pustules**

Small red solid bumps or pus-filled lesions often develop. While these may resemble acne, blackheads are absent. Burning or stinging may occur.

#### **Telangiectasia**

In many people with rosacea, small blood vessels become visible on the skin.

#### **Ocular Lesions or Irritation**

In many people with rosacea, the eyes may be irritated and appear watery or bloodshot, a condition known as ocular rosacea. The eyelids also may become red and swollen, and styes are common. Without medical care, severe cases can result in corneal damage and vision loss.

#### **Burning or Stinging**

Burning or stinging sensations may often occur on the face. Itching or a feeling of tightness may also develop.

#### **Dry Appearance**

The central facial skin may be rough, and thus appear to be very dry.

#### **Plaques**

Raised red patches, known as plaques, may develop without changes in the surrounding skin.

#### **Skin Thickening**

The skin may thicken and enlarge from excess tissue, most commonly on the nose. This condition, known as rhinophyma, affects more men than women.

#### **Edema**

Facial swelling may accompany other signs of rosacea or occur independently.

#### **Signs Beyond the Face**

Rosacea signs and symptoms may also develop beyond the face, most commonly on the neck, chest, scalp or ears.

### **Subtypes of Rosacea**

The *National Rosacea Society* assembled a consensus committee and review panel of 17 medical experts worldwide. Its' mission was to develop a standard classification system and standardize terminology used to diagnose rosacea. The committee based their system on current scientific knowledge of the disease morphology and tried to avoid assumptions based upon pathogenesis and progression. The committee worked to identify four subtypes of rosacea, as defined by common patterns or groupings of signs and symptoms.

### **Classification of Rosacea**

**Subtype 1** (erythematotelangiectatic rosacea), characterized by flushing and persistent redness, and may also include telangiectasias.

**Subtype 2** (papulopustular rosacea), characterized by persistent redness with papules and pustules.

**Subtype 3** (phymatous rosacea), characterized by skin thickening known as hypertrophy, often resulting in an enlargement of the nose.

**Subtype 4** (ocular rosacea), characterized by ocular manifestations such as dry eye, tearing and burning, swollen eyelids, recurrent styes and potential vision loss from corneal damage.

Many patients experience characteristics of more than one subtype at the same time, and those often may develop in succession. While rosacea may or may not evolve from one subtype to another, each individual sign or symptom may progress from mild to moderate to severe. Early diagnosis and treatment are therefore recommended.

### **Rosacea Treatment Options**

Because the signs and symptoms of rosacea vary from one patient to another, treatment must be tailored for each individual case.

Various oral and topical medications may be prescribed to treat the papules, pustules and redness often associated with the disorder. Dermatologists usually prescribe an initial treatment with oral antibiotics. Doxycycline in a 40 mg, once daily, controlled-release capsule is FDA-approved for treatment of rosacea to bring the condition under immediate control. Oral isotretinoin has also been reported to be effective for severe and/or refractory rosacea. Oral therapy may then be followed by long-term use of the topical therapy alone to maintain remission.

Topical therapies include metronidazole, in formulations including 1% gel, 0.75 cream, 1% cream and 0.75% lotion. Azelaic acid 15% gel is the most recent first-line treatment and the proposed mechanisms of action are anti-inflammatory, antioxidant and antimicrobial, with proven action against *propionibacterium acnes* and *pityrosporum ovale*. Sodium Sulfacetamide:Sulfur in a 10% lotion has also demonstrated significant reductions in lesion counts and other rosacea related symptoms.

When appropriate, laser therapy, intense pulsed light sources or other medical and surgical devices may be used to remove visible blood vessels, reduce extensive redness or correct disfigurement of the nose. Photodynamic therapy (PDT) uses a photo sensitizer alone with a light source that destroys its target in the presence of molecular oxygen. Both refractory rhinophyma and papulopustular signs have been successfully treated with these modalities

Finally would be the consistent use of a gentle skin-care routine which can also help control rosacea. Patients are advised to clean their face with a mild and non-abrasive cleanser, then rinse with lukewarm water and blot the face dry with a thick cotton towel. Never pull, tug or use a rough washcloth.

Patients may apply non-irritating skin-care products as needed, and are advised to protect the skin from sun exposure using a sunscreen with an SPF of 15 or higher.

Cosmetics may be used to conceal the effects of rosacea. Green makeup or green-tinted foundations can be used to counter redness. This can be followed by a skin-tone foundation with natural yellow tones, avoiding those with pink or orange hues.

### **Lifestyle Management**

In addition to medical treatment, rosacea sufferers can improve their chances of maintaining remission by identifying and avoiding lifestyle and environmental factors that trigger rosacea flare-ups or aggravate their individual conditions. For listings of common factors that may aggravate rosacea in individual cases, see *Rosacea Triggers* ([www.rosacea.org](http://www.rosacea.org)) *The National Rosacea Society* offers a free *Rosacea Diary Booklet* to assist patients in identifying factors that may affect their rosacea, as well as a booklet called "*Coping with Rosacea*" that provides tips on lifestyle management.

In a recent survey of 1,190 rosacea patients conducted by the *National Rosacea Society* and published in *Rosacea Review*, 8% said their rosacea is affected by changes in seasons. Nearly half of the respondents said their symptoms are at their worst when hot weather arrives. Forty-six percent said they have to make the most lifestyle adjustments during this time to reduce the likelihood of a flare-up of signs and symptoms.

The most common rosacea triggers include hot or cold weather, sun exposure, emotional stress, wind, heavy exercise, alcohol, hot baths, spicy foods, humidity, indoor heat, certain skin-care products and heated beverages.

Overexertion is also a common rosacea trigger, and sipping a cold drink or chewing on ice chips can help prevent or reduce the facial flushing that often accompanies strenuous activity.

The survey found that cold weather may be problematic for many rosacea sufferers as well. Thirty-five percent of all respondents and 46% of those who live in the North said their symptoms are at their worst during cold weather, when raw wind and biting temperatures can irritate already-sensitive facial skin.

Nearly a third of the survey respondents and 44% of those in northern areas of the country said they make lifestyle adjustments to ward off rosacea outbreaks during winter, such as covering their face with a scarf before going outdoors or avoiding facial flushing by steering clear of the piping hot beverages often served on chilly days.

Although the cause of rosacea is unknown, its signs and symptoms can be controlled with medical therapy and lifestyle changes to avoid factors that may aggravate the condition.

### References:

1. National Rosacea Society, 800 S. Northwest Highway, Suite 200, Barrington, Illinois 60010, or call its toll-free number at 1-888-NO-BLUSH. Information and materials are also available on the society's Web site at [www.rosacea.org](http://www.rosacea.org)
2. Wilkin JK. Rosacea: pathophysiology and treatment. *Arch Dermatol* 1994;130:359-62.
3. Standard classification of rosacea: Report of the National Rosacea Society Expert Committee on the Classification and Staging of Rosacea *J Am Acad Dermatol* 2002;46:584-7.
4. Roebuck, HL & Siegel, MT., Inflammatory Rosacea. *J Dermatol Nurses*, 2009 1;1: 36-47.

## ROSACEA—Signs, Symptoms and Subtypes

COA#PCIA0709

### CE TEST

1. Rosacea is considered a:
  - a. communicable disease
  - b. autoimmune disease
  - c. cutaneous disease
  - d. inflammatory disease
  
2. Which of the following is *not* a primary sign of rosacea?
  - a. telangiectasia
  - b. erythema
  - c. bacteria
  - d. edema
  
3. It has been reported that a number of rosacea patients are more concerned about:
  - a. post-inflammatory hyperpigmentation (PIH)
  - b. erythematous patches
  - c. allergic contact dermatitis
  - d. pustules and nodules
  
4. Rosacea can be best treated with:
  - a. oral medication
  - b. a tailored approach
  - c. topical medication
  - d. a light therapy approach
  
5. Phymatous rosacea is characterized by:
  - a. skin thinning
  - b. loss of vision
  - c. hypertrophy
  - d. burning
  
6. Lifestyle management is to:
  - a. take your medication
  - b. calm and de-stress
  - c. identify and avoid triggers
  - d. use caution
  
7. PDT uses a light source with a:
  - a. cleanser
  - b. UV light
  - c. green-tint
  - d. photosensitizer
  
8. Erythematotelangiectatic rosacea is likely to be:
  - a. peeling and flaking
  - b. hyperpigmentation
  - c. erythema and redness
  - d. cutaneous infections
  
9. Azelaic acid is prescribed to patients to treat:
  - a. dry skin
  - b. erythema
  - c. bacteria
  - d. hypertrophy
  
10. The cause of inflammatory rosacea is:
  - a. bacteria
  - b. mites
  - c. unknown
  - d. redness
  
11. Review of home care should include a discussion of:
  - a. weight management
  - b. birth control
  - c. lifestyle management
  - d. vitamins & minerals
  
12. Which is *not* a characteristic of Subtype 1?
  - a. flushing
  - b. visible blood vessels
  - c. styes
  - d. persistent redness
  
13. Regardless of ethnicity, hot weather triggered:
  - a. 8% of the respondents
  - b. nearly half of survey respondents
  - c. 36% of the respondents
  - d. none of the respondents
  
14. Subtype 3 is characterized by:
  - a. hypertrophy
  - b. tearing
  - c. edema
  - d. flaking
  
15. Which of the following is *not* recommended?
  - a. tepid water
  - b. abrasive exfoliant
  - c. mild cleanser
  - d. sunscreen
  
16. Ocular lesions are located in the:
  - a. nose
  - b. back
  - c. mouth
  - d. eyes
  
17. Which of the following is *not* a treatment for rosacea?
  - a. doxycycline
  - b. metronidazole
  - c. retinoic acid
  - d. azelaic acid
  
18. Typology is the study of:
  - a. skin, hair and nails
  - b. anatomy and physiology
  - c. analysis or classification
  - d. cysts and nodules

## CE REGISTRATION FORM

<b>Section A</b>	<b>ROSACEA–Signs, Symptoms and Subtypes COA# PCIA0709</b>
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**PRINT CLEARLY** (*Illegible forms will not be processed*)

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Tel: \_\_\_\_\_ Fax: \_\_\_\_\_

**Email:** \_\_\_\_\_ \*Delivery Method used to send CE Certificate

Are you certified?  Yes  No

NCEA Certification# \_\_\_\_\_

Other Certification \_\_\_\_\_

Type of License:

Esthetician  Cosmetologist  Medical Professional  Other

License # \_\_\_\_\_ State of Issue \_\_\_\_\_

<b>Section B</b>
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Test Answers:

Darken one for your answer to each question

	A	B	C	D		A	B	C	D
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	10.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	11.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	12.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	13.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	14.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	15.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	16.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	17.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	18.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<b>Section C</b>
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**Course Evaluation:**

1. Did this CE activity's learning objective relate to its general purpose?  Yes  No
2. Was the elearning format an effective way to present this material?  Yes  No
3. Was the content relevant to your skin care practice?  Yes  No
4. How long in minutes did it take you to read the article \_\_\_\_\_, study the material \_\_\_\_\_, and take the test \_\_\_\_\_?
5. Suggestions for future topics \_\_\_\_\_

<b>Section D</b>
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**Payments and Discounts:**

The registration fee for this test is \$24.95. (Check or money order payable to PCI Journal) to 484 Spring Avenue, Ridgewood, NJ 07450-4624.

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