



Society of Dermatology
SkinCare Specialists
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Approved Provider

TRIGGERS & TREATMENT OF ATOPIC DERMATITIS

COA#PCIA0809

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.

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#PCIA0809

GENERAL PURPOSE STATEMENT

To provide the skin care professional with a review of *Triggers & Treatment of Atopic Dermatitis*.

LEARNING OBJECTIVES

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

1. Describe the treatment modalities used to treat atopic dermatitis.
2. Outline and understand the triggers that can exacerbate the disease.

TRIGGERS & TREATMENTS OF ATOPIC DERMATITIS

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Background

Atopic dermatitis is a chronic, itchy skin condition that is very common in children but may occur at any age. It is also known as eczema and atopic eczema. It is the most common form of dermatitis.

Atopic dermatitis usually occurs in people who have an 'atopic tendency'. This means they may develop any or all of three closely linked conditions; atopic dermatitis, asthma and hay fever (allergic rhinitis). Often these conditions run within families with a parent, child or sibling also affected. A family history of asthma, eczema or hay fever is particularly useful in diagnosing atopic dermatitis in infants.

Atopic dermatitis is not contagious! It arises because of a complex interaction of genetic and environmental factors.

Triggers

AD may often be associated with other contact allergens and recognizing the triggers, must be done on an individual patients basis. Irritants such as soaps, detergents, cosmetic ingredients and chemicals as well as acidic foods such as citrus have all been known to cause irritation. Elimination of these irritants can be accomplished through proper education and screening of the most common types of allergens.

Microbial Infections range from your standard cold or flue to viruses such as herpes simplex and molluscipox. There are well over 182 identified bacterial species that exist in the well-defined cutaneous ecosystem. However, the most common skin infection found in AD sufferers is *S. aureus*. A colonization of molluscipoxvirus, herpes simplex, *Malassezia* and dermatophytes has also been suspected trigger flares as well. Other extracutaneous bacteria may inhabit the urogenital tract, gut and upper airway, and their role in AD flares is less defined.

Erythema, edema and crusting are exhibited in a flare, and treatment depends on the correct diagnosis. The associated itch of AD is often the most distinguishing feature of a flare vs. skin pain caused by infection.

Itch Scratch Cycle

Secondary infections are not at all uncommon in a patient with AD or ACD. The additional inflammation commonly results in a characteristic lichen simplex chronicus. Reducing the urge to scratch may require some inventive ways to stop the unconscious scratching. Keeping fingernails trimmed short and smooth at all times by keeping an emery board in easy to find places. The application of cool packs or putting a non-irritating moisturizer in the fridge has also been

noted to relieve scratching or to break the cycle. Bathing, moisturizing and medication is the key to controlling chronic inflammation.

Other External Factors

Minimizing irritation may also be accomplished by washing all new clothes several times before wearing, removing clothing tags that may irritate the skin, minimize use of detergents and add a second rinse cycle. Open-weave, smooth cotton blends that are loose-fitting as well as lightweight materials that do not have restrictive elastic bands that may cause friction with the skin.

Indoor environmental factors that may lessen an inflammatory reaction are to maintain a constant room temperature, and constant humidity level. The experts agree that optimal room humidity is 25 – 45% with a consistent temperature. Setting the thermostat too high results in constricting of blood vessels which promotes itching.

Outdoor activities such as swimming in a chlorinated pool can actually help AD in eliminating bacterial count. Use of sunscreen that contains chemical ingredients is best avoided and rather use a preservative-free zinc oxide or titanium dioxide-based ingredients would provide sun protection. For summertime bug protection, the recommendation by Dr. Siegfried is a product that contains permethrin. It is sprayed on the surface of clothing, not skin, and it binds to the material—even up to 6 weeks with laundering.

Treatment

Frequent daily soaking is the safest, most effective approach to controlling colonization and infection. The addition of standard household bleach became a well-accepted recommendation, although the optimal amount has not been defined. A common recommendation is 1 tablespoon added to a baby bath, and up to ½ cup for a full bathtub of water. Colloidal oatmeal, green tea, black tea, sodium or magnesium salts are less studied, but are an accepted options for bathing. Bath oils are not recommended for children due to slip and falls.

Topical corticosteroids or calcineurin inhibitors are the most effective initial therapy for AD-affected, *S. aureus* colonized skin. The use of systemic drugs, especially in children with AD is somewhat controversial.

They're over-the-counter and prescription drugs available that can treat the inflammation. The use of corticosteroids should not exceed once a day, and intermittent use, is the safest and most effective. Immunomodulators such as tacrolimus have shown excellent results compared to hydrocortisone and are

usually used as a second-time therapy. Recommended guidelines to determine what may be needed on any given day include:

- Match potency of applied medication to the degree of inflammation. (In other words, don't use corticosteroids if you don't need to)
- Occlusive ointments are most effective.

Under physician care, additional patient guidelines might also include:

- No automatic refills and require patients to bring in all medication for follow-up visits.
- Provide patients with dosing instructions based on degree of inflammation.

The use of diphenhydramine (Benadryl®) and hydroxyzine (Atarax® and Vistaril®) antihistamines for treatment of hives is effective and drowsiness lasts less than 6 hours. Over-the-counter cetirazine (Zyrtec®) and loratidine (Claritan®) are longer lasting taken once a day.

Use of Emollients

Immediately after a daily bathing, the immediate application of a hydrating cream, lotion or foams is the best way to prevent trans epidermal water loss. Although ointments are more viscous, they are not desirable to wear and may stain clothing. Caution must be used to reduce the risk of ACD and the rule of thumb is once again to use products that have the least ingredients. Educating patients on ingredient labeling—to recognize the active vs. inactive ingredients, fragrance-free vs. unscented products—are very important in reducing flares and maintaining skin integrity.

References:

1. A Multifaceted Approach to Treating Atopic Dermatitis. Elaine Siegfried, M.D., Skin & Aging Supplement. July 2009.
2. American Academy of Dermatology

TRIGGERS & TREATMENT OF ATOPIC DERMATITIS COA#PCIA0809

CE TEST

1. Atopic Dermatitis is a cutaneous:
 - a. immune deficiency disease
 - b. autoimmune disease
 - c. infectious disease
 - d. inflammatory disease

2. The most common skin infection found in atopic dermatitis sufferers is:
 - a. *malassezia*
 - b. dermatophytes
 - c. molluscipoxvirus
 - d. *s. aureus*

3. Household bleach in atopic dermatitis is used to:
 - a. reduce itching
 - b. hydrate the skin
 - c. clean clothing
 - d. reduce bacterial count

4. Patients can eliminate flares by:
 - a. recognizing triggers
 - b. by waiting to see
 - c. hydrating the skin
 - d. having light therapy

5. Which of the following is *least* recommended in treating atopic dermatitis in children?
 - a. topical corticosteroids
 - b. calcineurin inhibitors
 - c. bath oils
 - d. bleach

6. Which are *not* a home care recommendation?
 - a. keep fingernails short
 - b. use non-irritating moisturizers
 - c. frequent daily soaking
 - d. tight-fitting clothing

7. Washing new clothes before wearing, removing clothing tags are examples of:
 - a. keeping cloths new looking
 - b. reducing possible irritation
 - c. making cloths look used
 - d. none of the above

8. Room temperature and what range of humidity are recommended for atopic dermatitis sufferers?
 - a. 50-70%
 - b. 35-45%
 - c. 25-45%
 - d. 25-35%

9. Permethrin is used for:
 - a. laundering clothes
 - b. uv protection
 - c. bug protection
 - d. treating inflammation

10. Corticosteroids reduce:
 - a. dehydration
 - b. inflammation
 - c. *s. aureus*
 - d. edema

11. Secondary infection in atopic dermatitis:
 - a. is rare in children
 - b. is caused by drugs
 - c. is caused by scratching
 - d. is caused by viruses

12. Drowsiness is a side effect of:
 - a. hydrocortisone
 - b. malassezia
 - c. diphenhydramine
 - d. simplex chronicus

13. Patient education should include discussion of:
 - a. ingredient labeling
 - b. fragrance free products
 - c. active vs. inactive ingredients
 - d. all of the above

14. Systemic medications to treat hives are called:
 - a. antibacterials
 - b. antivirals
 - c. corticosteroids
 - d. antihistamines

15. Closely related conditions that may develop are:
 - a. asthma
 - b. atopic dermatitis
 - c. allergic rhinitis
 - d. all of the above.

16. Foods that may trigger atopic dermatitis are:
 - a. alkaline based
 - b. acid based
 - c. pH balanced
 - d. none of the above

17. Erythema, edema and crusting are all exhibited in a flare and treatment depends on:
 - a. systemic medication
 - b. correct diagnosis
 - c. topical medication
 - d. flare vs. skin pain

18. The key to controlling chronic inflammation is:
 - a. bathing in bleach and use medication
 - b. bathing moisturizing and reducing bacteria
 - c. bathing, moisturizing, and medication
 - d. bathing, and not scratching

CE REGISTRATION FORM

Section A	Triggers & Treatment Of Atopic Dermatitis	COA# PCIA0809
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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 _____

Section B

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"/>
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Section C

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 _____

Section D

Payments and Discounts:

The registration fee for this test is \$24.95. (Check or money order payable to PCI Journal)
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