

Difference Between Atopic Dermatitis and Eczema

www.differencebetween.com

Key Difference - Atopic Dermatitis vs Eczema

Eczema is an inflammatory condition of the skin characterised by groups of vesicular <u>lesions</u> with a variable degree of exudates and scaling. There are different clinical varieties of eczema of which atopic dermatitis is one. Atopic dermatitis can be identified as a familial, genetically complex dermatological disorder with a strong maternal influence. Accordingly, the **key difference** between atopic dermatitis and excema is that **atopic dermatitis is one component of the broad spectrum of diseases which comes under the category eczema.**

What is Atopic Dermatitis?

Atopic dermatitis can be defined as a familial, genetically complex dermatological disorder with a strong maternal influence. This condition is associated with other atopic diseases and usually starts under the age of 2 years. Although the pathophysiology of the condition is not fully understood, abnormalities in skin barrier function together with abnormalities of both adaptive and innate immunity seem to be important.

Exacerbating Factors

- Infections
- Soap, bubble bath, woollen fabric
- Teething in young children
- Severe anxiety and stress
- Cat and dog dander

Clinical Features

A variable clinical presentation can be seen in atopic dermatitis. Most commonly we can see erythematous, itchy, scaly patches mainly in the flexures of the elbows, knees, ankles, wrists and around the neck. Other clinical features that appear in atopic dermatitis are;

- Appearance of small vesicles
- Excoriation
- Skin thickening(lichenification)
- Pigmentary changes of the skin
- Prominent skin creases on palms
- Dry, 'fish-like' scaling of the skin

Investigations

History and clinical features are crucial in the diagnosis of atopic dermatitis. Laboratory findings such as raised total <u>serum IgE</u>, allergen-specific IgE, and mild eosinophilia can be seen in about 80% of the patients.

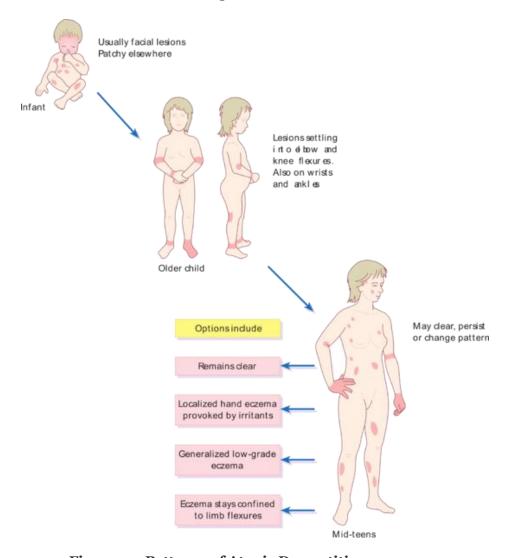


Figure 01: Patterns of Atopic Dermatitis

Management

- Education and explanation
- Avoidance of allergens and irritants
- Bath oils/soap substitutes
- Use topical therapies of steroids and immunomodulators
- Emollients
- Using adjunct therapies like oral <u>antibiotics</u>, sedating antihistamines and bandaging
- Phototherapy
- Systemic therapies of oral ciclosporin and oral <u>prednisolone</u>

What is Eczema?

Eczema is an inflammatory condition of the skin characterized by groups of vesicular lesions with a variable degree of exudates and scaling. Vesicles are formed as a result of the edema in between the epidermal cells. There are different types of eczema of which atopic dermatitis is one. The other varieties of eczema include,

Contact dermatitis

Contact dermatitis can be defined as dermatitis precipitated by exogenous agents, often a chemical. Nickel sensitivity is the commonest contact allergy, affecting 10% of women and 1% of men.

Etiopathogenesis

Irritants than allergens mostly cause contact dermatitis. But the clinical appearances of both seem to be similar. Allergic contact dermatitis is caused immunologically by type IV hypersensitivity reactions. The mechanism by which irritants cause dermatitis varies, but the direct noxious effect on the skin's barrier function is the most frequently observed mechanism.

The most important irritants associated with contact dermatitis are;

- Abrasives ex: frictional irritancy
- Water and other fluids
- Chemicals ex: acids and alkalis
- Solvents and detergents

The effect of most of these irritants is chronic, but a strong irritant causing necrosis of epidermal cells may produce a reaction within few hours. Dermatitis can be induced by repetitive and cumulative exposure to water abrasives and chemicals over several months or years. This commonly occurs in hands. Susceptibility of individuals with a history of atopic eczema to irritants, to have contact dermatitis is high.

Clinical Presentation

Dermatitis can affect any part of the body. When dermatitis appears at a particular site, that suggests contact with a certain object. When a patient having a history of Nickel allergy, presents with eczema on the wrist, that suggests an allergic response to a watch strap buckle. It is easy to list the possible causes by knowing the patient's occupation, hobbies, history and use of cosmetics or medicaments. Environmental sources of some common allergens are given below.

Allergen	Source
Chromate	Cement, tanned leather
Cobalt	Primer paint, anti-corrosive
Colophony	Glue, plasticizer, adhesive tape, varnish, polish
Epoxy resins	Adhesive, plastics, moldings
Fragrance	Cosmetics, creams, soaps, detergents

Figure 02: Environmental Sources of Some Common Allergens

Through secondary 'auto sensitization' spread, allergic contact dermatitis can occasionally become generalized. The photo contact reaction is caused by the activation of a topically or systemically administered agent by ultraviolet radiation.

Management

The management of contact dermatitis is not always easy due to many and often overlapping factors which can be involved in any one case. The overriding objective is the identification of any offending allergen or irritant. Patch testing is particularly useful in dermatitis of the face, hands, and feet. It helps in identifying any allergens involved. The exclusion of an offending allergen from the environment is desirable in clearing dermatitis.



Figure 03: Eczema

But some allergens like Nickel or colophony are difficult to eliminate. Moreover, it is impossible to exclude irritants. Contact of irritants during certain occupations is inevitable. Protective clothing should be worn, adequate washing and drying facilities

should be provided in order to minimize the contact with such irritants. Secondary to avoidance measures, patients can use topical steroids in contact dermatitis.

• Eczema herpeticum

Children with atopic dermatitis are at a higher risk of developing <u>herpes</u>, viral infections which may be life-threatening,

• Nummular eczema

Coin-shaped lesions appear on trunk and legs

• Paget's disease of the breast

Eczema around the nipples and areola of women which is most often due to an underlying carcinoma

• <u>Lichen</u> simplex

This is characterized by the formation of a localised area of lichens due to rubbing

Neurodermatitis

Generalized itching and dryness of the skin

• Asteatotic dermatitis

Occurs in elderly people particularly on the legs

Stasis eczema

These appear in areas of venous congestion

What are the Similarities Between Atopic Dermatitis and Eczema?

- Pruritus is a common feature seen in most of the forms of eczema including atopic dermatitis
- Most of the forms of eczema are exacerbated by different factors such as infections, soap, bubble bath, woollen fabric, teething in young children, severe anxiety and stress, cat and dog dander

What is the Difference Between Atopic Dermatitis and Eczema?

Atopic Dermatitis vs Eczema			
Atopic dermatitis can be defined as a familial, genetically complex dermatological disorder with a strong maternal influence.	Eczema is an inflammatory condition of the skin characterized by groups of vesicular lesions with a variable degree of exudates and scaling.		
Genetic Predisposition			
There is a strong genetic predisposition.	There may or may not be a genetic predisposition.		

Summary - Atopic Dermatitis vs Eczema

Eczema is an inflammatory condition of the skin characterized by groups of vesicular lesions with a variable degree of exudates and scaling. There are different varieties of eczema such as stasis eczema, asteatotic eczema, etc. Atopic dermatitis is also one such variant of eczema which can be defined as an inflammatory condition of the skin characterized by groups of vesicular lesions with a variable degree of exudates and scaling. This is the difference between Atopic Dermatitis and Eczema.

Reference:

1.Buxton, Paul K. ABC of dermatology. London: BMJ, 2007

Image Courtesy:

- 1.'Pattern of atopic eczema varies with age'By Madhero88 Own work, (CC BY-SA 3.0) via Commons Wikimedia
- 2. 'Eczema'By BruceBlaus Own work, (CC BY-SA 4.0) via Commons Wikimedia

How to Cite this Article?

APA: Difference Between Atopic Dermatitis and Eczema.(2018 January 15). Retrieved (date), from http://differencebetween.com/difference-between-atopic-dermatitis-and-vs-eczema/

MLA: "Difference Between Atopic Dermatitis and Eczema" Difference Between.Com. 15 January 2018. Web.

Chicago: "Difference Between Atopic Dermatitis and Eczema." Difference Between.Com. http://differencebetween.com/difference-between-atopic-dermatitis-and-vs-eczema/ accessed (accessed [date])



Copyright © 2010-2017 Difference Between. All rights reserved