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Eczema

Description

- Eczema is an acute or chronic inflammatory condition of the skin and is a type of dermatitis. There are several different types of dermatitis; eczema is sometimes referred to as atopic dermatitis. Authorities generally disagree about how to distinguish between eczema and dermatitis.¹
- Symptoms may include a red raised rash, intense itching, fluid filled blisters, scales, crusts, and scabs alone or in a combination, they may be dry or have a watery discharge.² Scratching the rash can lead to bleeding and possibly infection.

Causes

- Allergies can provoke symptoms of eczema. Other factors can include chemical irritants, dry air, or excessive sunlight. Heredity may also play a causative role. People with eczema often have allergic asthma or hayfever. Symptoms can also increase with anxiety, stress and lack of sleep.³ Eczema can also be caused by a deficiency of essential fatty acids and or vitamin B-6, although this is not common.⁴ The disease can occur at any age but is most common in infants to young adults.

Prevention and Management

- The focus should be on prevention. Avoid specific allergens that provoke rashes.
- Avoid using harsh soaps, chemicals, or detergents that may aggravate the eczema by drying the skin.
- A low fat, nutrient dense diet should be consumed. When food allergies are the cause, eliminate the offending foods.³
- Vitamin C may work by boosting the immune response, and lessening the chance of developing skin infections.
- Zinc is important for proper immune functioning.
- Essential fatty acids are known to have beneficial effects on inflammation and the immune response.⁵

Abstracts

Casimir GJ, Duchateau J, Gossart B, Cuvelier P, Vandaele F, Vis HL. Atopic dermatitis: role of food and house dust mite allergens. Pediatrics 1993 Aug;92(2):252-6. OBJECTIVE. The aim of this study was to evaluate the humoral immune response to cow milk (CM) protein, soya protein, and house dust mites in a group of 64 CM-fed infants, who had atopic dermatitis as

the sole atopic manifestation, by measuring not only IgE but also specific IgG antibodies (Ab) against bovine beta-lactoglobulin, soya flour aqueous extracts, and Der P1 antigens. METHODS. A CM-free diet (Nan HA, Nestle) was given to these 64 CM-fed infants and the sensitivity to CM proteins was established by a positive challenge test with the offending food in improved infants. The serum was obtained just before the start of the CM-free diet, at the first consultation. The patients were classified into two groups according to their clinical response to the hypoallergenic formula. RESULTS. Thirty-one infants (group 1) improved dramatically (positive challenge test), and 33 (group 2) did not improve with the exclusion diet but did improve after eviction of dust-producing items in the environment. The two groups were different in terms of their total IgE immunoglobulin concentration (higher in group 1, $P < .05$) and concentration of specific IgE Ab against CM protein (more frequent in group 1, $P < .01$). The IgG Ab concentrations against beta-lactoglobulin, the major CM antigen ($P < 10^{-4}$), and against soya protein ($P < .01$) were significantly more elevated in the group improved by the diet, with a threshold above which the response to the exclusion diet could be predicted as positive. On the contrary, the level of specific IgG Ab against house dust mites was four times higher in group 2 than in group 1. Twenty-nine of the 33 infants of group 2 improved after eviction of dust-producing items in the environment. CONCLUSIONS. It is proposed that specific IgG Ab concentrations against beta-lactoglobulin, soya protein, and Der P1 antigen be determined in infants and children suffering from atopic dermatitis as a means of predicting the response to an exclusion diet, and a possible role of house dust mites in the pathogenicity of the disease is suggested.

References

- ¹ The Merck Manual. 16th ed. Rahway (NJ):Merck Research Laboratories; 1992. p 2407-14.
- ² Taber's Cyclopedic Medical Dictionary. 16th ed. Philadelphia:FA Davis Company; 1989. p 559.
- ³ Somer E. The Essential Guide to Vitamins and Minerals. New York:HarperPerennial; 1992. p 175.
- ⁴ Ensminger AH, Ensminger ME, Konlande JE, Robson JRK. The Concise Encyclopedia of Foods and Nutrition. Boca Raton (FL):CRC Press; 1995. p 254.
- ⁵ Werbach M. Healing with Food. Tarzana (CA):Third Line Press; 1993. p 123-25.