

Role of Allergy in Skin Conditions

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The term “allergen” is most often used in the vocabulary of everyday life to indicate the entire substance that can initiate an allergic reaction, such as certain pollens, moulds, house dust mites, animal dander, cow milk, and other inhalants or food items known to trigger immediate or late hypersensitivity reactions. The term is also used to denote environmental components that elicit delayed hypersensitivity reactions. Delayed type of hypersensitivity is driven by immune cells Lymphocytes that play a role in skin conditions (e.g. allergic contact dermatitis to chemicals or metals and in some cases of atopic dermatitis (eczema) that are exacerbated by specific food or other allergens).

Patch test or epicutaneous test is an allergy test that detects delayed hypersensitivity reaction to chemicals in cosmetic and household products, perfumes, metals and is done in clinic with follow ups in 48h, 72h and 96h when the site of the test is observed. This test is useful for allergic contact dermatitis and other conditions where delayed hypersensitivity is suspected

More than 25% of population on the other hand are suffering from Type I (immediate) hypersensitivity –hay fever and asthma, some forms of atopic dermatitis mostly in young children) This type of allergy is due to the formation of IgE antibodies against harmless environmental substances (mostly proteins) - allergens.

Among other tests skin prick testing is used to test for immediate allergic response. It is considered positive when wheal 3mm or greater is detected with valid positive and negative controls. This method allows us to test the whole chain of allergic response from introduction of the allergen that cross-links two neighbouring specific IgE antibodies on the surface of the mast cell causing histamine liberation and its effects through receptors to histamine on blood vessels leading to swelling and redness.

Specific treatment of Allergic Rhinitis

A hallmark of allergy treatment is allergen immunotherapy, currently the only medical intervention that can potentially affect the natural course of the disease. The European Academy of Allergy and Clinical Immunology presented the European Declaration on Allergen Immunotherapy – the document that aims to provide a robust statement on the use of immunotherapy, its availability for allergic patients, and the need for resources to fund relevant research. Furthermore, the general population will greatly benefit from increased awareness and use of allergen immunotherapy and its potential.

References

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