# THE INCIDENCE OF ALIMENTARY ALLERGEN FACTORS IN SKIN-MUCOSA ALLERGY DISEASES

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### **Abstract**

In the current work we have tried to emphasize the fact that hives is a disease produced by allergic factors as well as by non-allergic factors. The allergic factors are more and more represented by the the alimentary allergens present in a great variety of food, of animal or vegetal origin, processed or less processed because the nowadays consumers manifest an increased request for food packed in attractive colors and the consumers also adopt diets that favor the loss of certain nutrients and of certain biologically active substances thus alimentation plays an important etiopathogenic role in alimentary hives

Key words: alimentary allergies, allergic factors, hives.

# INTRODUCTION

Hives is a skin-mucosa allergic disease which can appear at any age, characterized by a transitory eruption of erythematosus and edematous papules and plates that appear suddenly, intensely pruritic resembling those that appear when touching the skin with a nettle. In case of the hives the skin as well as the subcutaneous tissue are implied.

Hives represents about 4,5% of the cutaneous morbidity. Studies show that approximately 20% of the population has at a certain time a hives eruption.

# MATERIAL AND METHOD

# Etiopathogenesis

Hives is determined by the variation of the factors that act through different pathogenic mechanisms. These changes are produced by different mediators from which histamine is the most known one and which is released exclusively only from the skin mastocytes through an unloading mechanism(figure 1) which can be of two types: allergic and non allergic.

# Allergic mechanism - corresponding to the I and III hypersensitivity immune reactions, type I of average hypersensitivity through IgE being the most frequently implied and which is fixed on to the Fc receptor from the mastocyte and which produces the mastocyte degranulation when it meets the specific antigene, setting the pro inflammatory mediators free. Non allergic mechanism - in which the chemical mediators are freed directly from the cells by the exogenous factors through reversible chemical reactions.

Figure 1. Histamine unloading mechanism

When establishing the diagnosis of allergic hives we start from a series of data, as follows:

- in 20% of the cases of alimentary hives and not only there are allergic antecedents in the family.
- in 33% of the cases personal allergic antecedents have been discovered.
- in 85% of the cases there is an incapacity to neutralize the histamine excess.

A laboratory method to diagnose the hives is the challenge test.

The previously presented data together with modern laboratory tests associated with the challenge test have proved that only 5-8% of the hives are of allergic origin. According to the nature of the allergene to which the sensitivity test has been done we can distinguish more clinical forms among which the alimentary hives is also to be found.

## RESULTS AND DISCUSSIONS

After thse diagnosis methods we have reached some clinical aspects on the basis of which we have determined the allergene that has caused the hives.

Hives is characterized by erythematosus – edematous papules well determined with dimensions varying from the size of a needle pin to plates

that have got a diameter of some centimeters, of china-pink color, paler in the center and with a peripheral erythemateous halo. They can be uniformly pink or white due to the compression of the interstitial edema upon the dermic vessels. The lesions can turn to erythematosus and edematous plates and pads of different dimensions, from a few centimeters with a polycyclic or arch like contour.

The alimentary hives is part of the allergic, anaphylactic hives. Food and food additives are frequently involved in hives. The most frequently met food is: eggs, especially the egg's white, milk, cheese, and other dairy products, nuts, peanuts, fish, chocolate, citrus, shells, pork, canned meat, salami, sausages, smoke dried products, tomatoes, strawberries, wild strawberries, mushrooms, crustaceans and spices.

Other useful information that have contributed to the interpretation of the results have been the evolutionary aspects of the hives.

According to the evolution the analyzed cases of hives have been: acute – lasting from 4 days to even 3 weeks, case in which the papule elements associated with vesicles and bubbles.

subacute, recurrent which repreated at different time intervals;

- chronic, case in which the eruption lasts over 6 weeks or repeats itself monthly over a period of 6 months or of more years.

# **CONCLUSIONS**

An alimentary allergy usually appears in acute or recurrent hives attacks starting a few minutes or hours after the ingestion of the food and lasting hours or days. Sometimes it can appear many hours after the ingestion of the food due to a slower metabolism.

Some food like wild strawberries, the egg's white, the crustaceans produce allergies by releasing the histamine stored in the mastocyte.

Canned food produces hives as they contain an excess of histamine.

Alimentary allergies can appear if people consume food that have in their composition some added substanced, among which we can mention the salycilates, the beer yeast, the citric acid, derivatives of the benzoic acid.

Hives appears anywhere on the teguments or on mucosa and they can be isolated or disseminated, asymmetric. They appear all of a sudden preceded or accompanied by intense pruritus, sometimes associated with the burning sensation.

The hives plate has got an ephemeral character and disappears within a few hours without leaving traces. Other eruptive elements continue to appear for many days or weeks or even months in other regions of the skin so that at some sick people the eruption evolves in successive spurts.

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