FOOD ALLERGY IN PEDIATRICS

ESSAY

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بسم الله الرحمن الرحيم

إقرأ باسْمِ ربّكَ الذَى خَلقَ ● خَلقَ الإنسانَ من علَقِ ● إ
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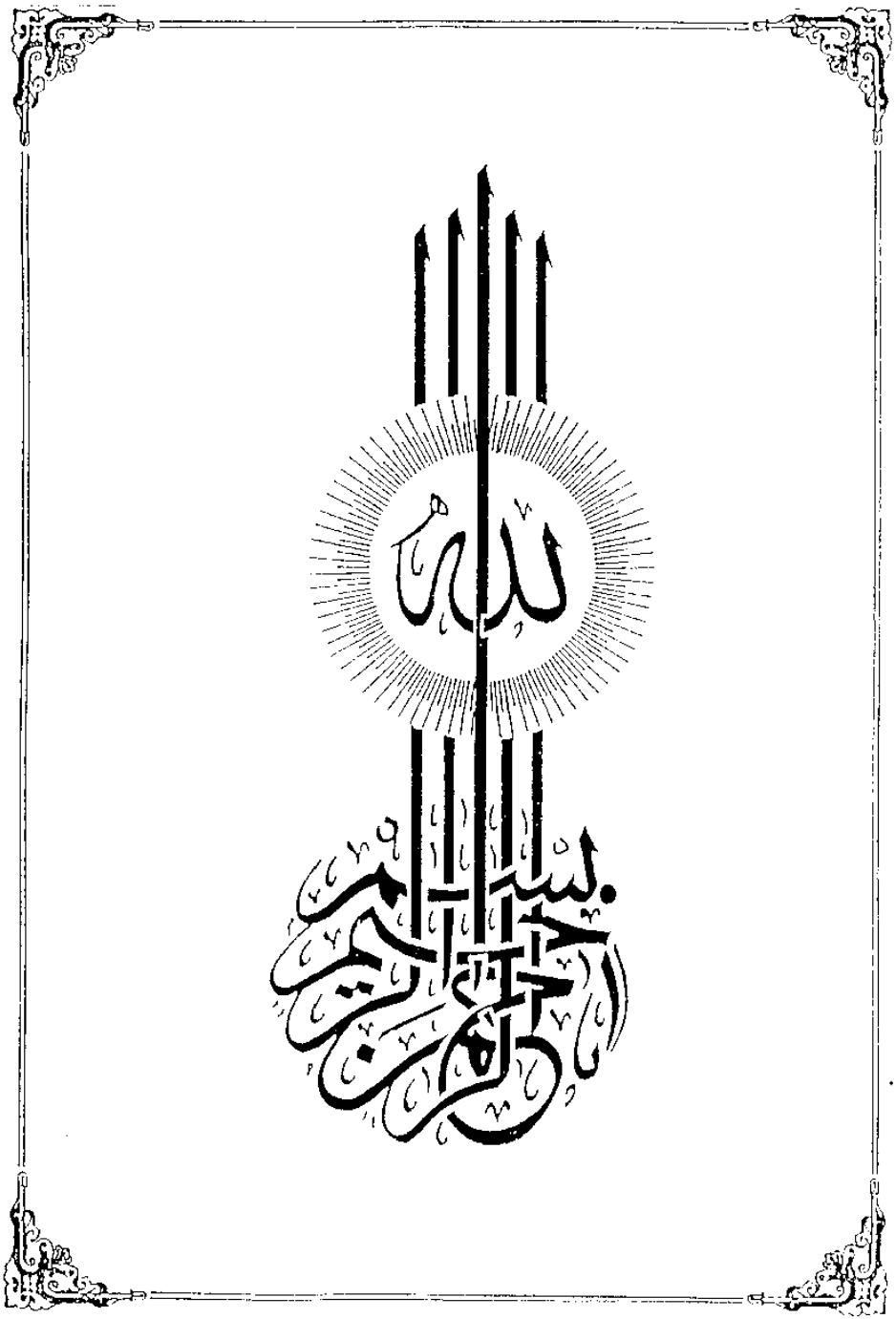

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Recent surveys indicate that the public has developed an increased awarness about "food allergy" and consider it a major health problem. Consequently, physicians are being confronted with more questions and facing more therapeutic decisions about adverse food reactions than in the past **(Burks and Sampson, 1988).**

Clinical concept in this field, however remains controversial and contradictory, indicated by the partly synonymous use of terms such as senstivity, allergy, hypersenstivity, intolerance and toxicity. The area certainly needs definition and differentiation in order to make a systemic and practical approach possible **(Stern and Walker, 1985).**

Many of the conditions reputed to be caused by food allergic reactions have until recently, not been studied in an objective fashion, nor has their treatment been properly evaluated. Furthermore, there are almost no useful tests to aid in the diagnosis of such reactions. Some deny the existance of food allergic disease, whilest others have become extremely interested in the subject. Fortunately, carefully conducted dietary

studies are now being carried out, and hard facts are beginning to emerge (Cani, 1985). Food allergy lagged 50 to 100 years behind inhalant allergy.

In 1980, the president of the American College of Allergists (Solomon Klotz, M.D.) decreed that food allergy had achieved the status of "the newest medical science" (Breneman, 1987).

Our drug-culture society should begin to appreciate that not all human misery can be alleviated by "taking something". Sometimes it is better to remove the "something" that initiates the suffering (Breneman, 1987).

The aim of this essay is to review the recent advances in epidemiology, pathogenesis, clinical manifestation, diagnosis, differential diagnosis, treatment, prognosis and prevention of food allergy.

TERMINOLOGY

TERMINOLOGY

One of the pressing problems in the area of adverse reactions to foods and food additives is that a realistic set of definitions has not been accepted universally (Anderson, 1986).

Unfortunately, the term allergy has become a lay term and a household word. It is commonly used to express a person's feeling that unpleasant effects came from that person's exposure to something that does not harm most people. It is also a term that has been commonly used in the medical literature to describe all sorts of adverse reactions regardless of the mechanism (May, 1984).

An allergic reaction is the adverse consequence of a specific immune event, that is, of the interaction between antigen and antibody or sensitized lymphocytes. (Bierman and Pearlman, 1988).

In this study, the definitions put by the American Academy of Allergy and Immunology Committee on Adverse Reactions to Foods and National Institute of Allergy and Infectious Diseases (Quoted from Andreson, 1986) will be used, Table (1).

Table 1: Glossary of terms (Quoted from Anderson, 1986).

Adverse reaction (sensitivity) to a food

A general term that can be applied to a clinically abnormal response attributed to an exposure to a food or food additive.

Food allergy (hypersensitivity)

An immunologic reaction resulting from the ingestion of a food or food additive; this reaction occurs only in some patients, may occur after only a small amount of the substance is ingested, and is unrelated to any physiological effect of the food or food additive; to many, the terms "food allergy and hypersensitivity" are synonymous with reactions that involve an IgE: immunologic mechanism, of which anaphylaxis is the classic example: to others the term may include any food reaction known to involve an immune mechanism; these are overused terms that have been incorrectly applied to any and all adverse reactions to a food or food additive.

Food anaphylaxis

A classic allergic (hypersensitivity) reaction to food or food additives in which the immunologic activity of IgE homocytotropic antibody and release of chemical mediators are involved.

Food intolerance

A general term describing an abnormal physiologic response to an ingested food or food additive; this reaction is not proved to be immunologic and can include idiosyncratic, metabolic, pharmacologic, or toxic responses to food or food additives, the term is often over-used and, like the term "food allergy" (hypersensitivity), has been applied incorrectly to any or all adverse reactions to foods.

Food toxicity (poisoning)

A term used to imply an adverse effect caused by the direct action of a food or food additive on the host recipient without the involvement of immune mechanisms; this type of reaction may involve nonimmune release of chemical mediators; toxins may be either contained within food or released by microorganisms or parasites contaminating food products; on some occasions, the term may be synonymous with idiosyncratic adverse reaction; when the reaction is anaphylaxis-like, it may be called "anaphylactoid".

Table (1) Cont'd

Food idiosyncrasy

A quantitatively abnormal response to a food substance or additive; this reaction differs from its physiologic or pharmacologic effect and resembles allergy (hypersensitivity) but does not involve immune mechanisms; food idiosyncratic reactions include those that occur in specific groups of individuals who may be genetically predisposed; when the reaction is anaphylaxis-like, it may be called "anaphylactoid".

Anaphylactoid reaction to a food

An anaphylaxis-like reaction to a food or food additive presumed to result from a nonimmune release of chemical mediators; this reaction mimics the symptoms of food allergy (hypersensitivity).

Pharmacologic food reaction

An adverse reaction to a food or food additive as a result of a naturally derived or added chemical that produces a druglike or pharmacologic effect in the host.

Metabolic food reaction

An adverse reaction to a food or food additive as the result of the effect of the substance on the metabolism of the host recipient.