

Human Animal Allergology: Synopsis and Invitation

Ibrahim Mohammad Saeed Shnawa*

College of Biotechnology, University of Qasim, Iraq

***Corresponding author:** Ibrahim Mohammad Saeed Shnawa, University of Qasim, Iraq, Tel: 9647800188929; Email: ibrahimshnawa3@gmail.com

Letter to Editor

Volume 1 Issue 1

Received Date: April 28, 2016

Published Date: May 6, 2016

DOI: 10.23880/ooaj-16000101

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Allergology is a science sub-speciality of immunology. It concerned with the study of allergy an altered immune body reactivity to allergenic antigens. Allergy is mostly of four [1] and leastly of five types [2,3] though, the four types notion holds right by most outstanding authors [1]. These types are; 1-Acute mediated by IgE and sometimes IgG together with mast cells, type I, 2- IgG or IgM mediated cytotoxicity together with complement and phagocytic cells, type II, 3-complex mediated inflammation involving complement and polymorphoneuclear leukocytes, type III, 4-cell mediated delayed T cell dependent recruitment of macrophage and eosinophils type IV and 5- antibody directly stimulates a cell function, type V. The types I - III and V can be transferred from the allergic to normal subject by antibodies ,while type IV can be transferred by T lymphocytes. According to the onset allergy is subdivided into immediate, semi-delayed and delayed [1-3]. Though some workers confines the term allergy to the immediate type, the "Atopy" [4]. Atopy has been linked to certain types of human leukocyte antigens (HLA) in human beings .In comparison the link of animal atopy to animal leukocyte antigens is rather unclear [5].

Environmental allergens are broadly classified into; Non-microbial allergens including house dust mites, pollens, animal wool, animal fur, and insect stings. And microbial allergens which covers an array of; Viral protein subunits, bacterial protein toxin super-antigens, bacterial spores and fungal spores. Though, bacterial tuberculus infection in human beings may associate with a spectrum of allergic types staring with the immediate passing into cytotoxic, immune complex followed by the delayed cell mediated type .Contact allergies may include; Metal contact allergy, occupational allergy, cat and dog allergies, animal allergies due to allergens from human origins. Nose and Ear allergies may be described in three allergy

entities; Intrinsic asthma with nasal polyp, seasonal rhinitis and secretory otitis media [6,7].

The exposure to allergens may pass through two paths; First the immediate allergic responses leading to release of vaso-active mediators and terminated by vasodilatation, edema, smooth muscle contraction and mucus secretion. The second is the delayed allergic responses mediated by cytokines and chemokine secretions, chemotaxis of granulocytes, mononuclear cells and release of inflammatory mediators leading to, edema, desquamation, sub-epithelial fibrosis, cellular infiltration and mucus secretions [8].

Allergy reactions happened both in human and animals [1,9]. Classically speaking, animal immunologist concerned with animal allergy [9] and human immunologist concerned with human allergy [1,6]. Though, the current view to allergy imply both human and animal immunologists site together with their students in an every now and then time periods held meetings to bridge information altogether to draw attention of the scientific community that it is the time to motivate "Human animal Allergology" for two aims. First , to be aware of control measures for prevention and management of allergy at places where there are chances for human and animals sharing life in same community or in a state of house hold contacts [8-12]. Second aim is purely academic for teaching purposes.

For the favor of the second aim, writing these lines as an invitation to the concerned workers to build up a text that covers the allergology allied topics. Let us have a look to my built proposal to a text contents presented in Table [1] the contents are supposed to be with marked molecular mechanismic approach. The layout invite the interested people to take part in writing chapter(s) which

then will be published as a multi-authored book . Hopes it will be a promising contribution in this field.

Chapter Sequence	Description
1	History
2	Introduction
3	Human Animal Allergens
4	Allergy Prone Human Immune system
5	Allergy Prone Animal Immune system
6	Molecular Mechanisms of Allergy in man
7	Molecular Mechanisms of Allergy in animals
8	Laboratory Animal Allergy Models predicting human allergy
9	Human Animal Allergy testing
10	Parallel, Similar but non-identical
11	Concluding Remarks
12	Future outlook

Table 1: The contents of Human Animal Allergology.

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