

# Ocular manifestation of allergy: allergic conjunctivitis

*Ranita Banerjee*

Centurion University of Technology and Management , Odisha

## 1. Introduction to Allergy:

Allergy is the process of adaptive immune response towards any kind of allergens (environmental particles which are not infectious), which maybe sterile parts of the specific infectious organism. Anaphylaxis, Hay fever also known as Allergic rhinitis, food allergies and allergic asthma, the allergen-specific IgE and T helper 2 (TH-2) cells recognize the antigens and acts against them. Allergic rhinitis (AR) is caused by the IgE-mediated inflammatory changes of the mucus layer of the nose. Currently 10% and 30% of the population is affected by allergy and it continues to increase worldwide. Out of these around 400 million suffer from allergy and nearly 300 million from asthma according to the latest World Health Organization (WHO) reports. Heredity, environmental factors, lifestyle changes are the precursor to the growth in allergic population.

## 2. Mechanism of allergy:

Clinically four types of hypersensitivity reaction can occur due to any kind of allergic reaction. Which are:

**Type 1: Immediate Hypersensitivity (Anaphylactic Reaction)** –Immunoglobulin E (IgE) antibody reacts against the soluble antigen, causing the mast cells to degranulate. This type of hypersensitivity reaction is called Type 1 Hypersensitivity.

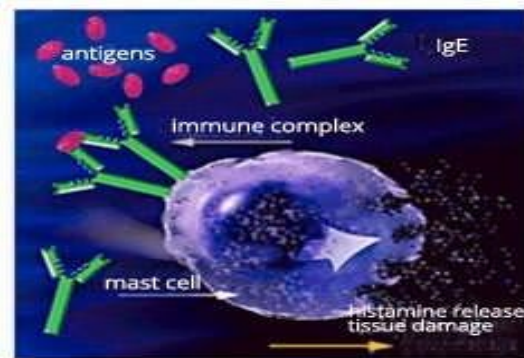


Fig: 1

**Type 2: Cytotoxic Reaction (Antibody-dependent)** - The other immune system effectors can cause cell damage when the IgG and IgM antibody react with the cellular

