

CURRICULUM: ALLERGY AND IMMUNOLOGY

I. GOALS

- To provide exposure, over a three year period, to frequently encountered diseases of altered immunity in both inpatient and office settings.
- To enable the resident to confidently recognize common clinical presentation of diseases of hypersensitivity.
- To develop an understanding of allergic and immunologic disease principles and methodologies, in order to initiate diagnostic evaluation and therapy.

II. CONTENT

- Basic principles of pathophysiology (understand the important aspects of history taking, physical exam and diagnostic testing)
- Understand the normal functioning of the immune system that is essential for health
- Understand how hyper-activity of one or more components results in the development of allergic and/or autoimmune disease
- Understand that these response may be manifested in one or more organ systems simultaneously, for e.g.
 - a) Systemic anaphylaxis
 - b) Eye chemosis, ocular, pruritis, conjunctival inflammation etc.
 - c) ENT rhinorrhoe, sneezing, etc.
 - d) Lungs dyspnea, cough, wheezing, sputum production etc.
 - e) Skin whealing, eczematous and papular eruption etc.

Clinical recognition

- ***Special emphasis is placed on the recognition of the following disease entities:***
 - a) Allergic conjunctivitis
 - b) Allergic rhinitis
 - c) Urticaria/angioedema
 - d) Anaphylaxis
 - e) Asthma
 - f) Drug allergy
 - g) Insect sting allergy

Diagnostic/Procedure skills

- A general understanding of the principles and processes of diagnostic evaluation of diseases of altered immunity will be encouraged. Special emphasis will be given to:
 - a) Spirometry and spirometric response to bronchodilators
 - b) Wright Giemsa stain of nasal and pulmonary secretions
 - c) Total eosinophil count
 - d) Drug desensitizing protocols
 - e) CT of lungs and sinuses
 - f) Immediate skin test for IgE mediated reactions to inhalants, foods, etc.
 - g) Levels of complement components, CI esterase inhibitor
 - h) Methacholine inhalation challenge
 - i) Patch tests
 - j) Prick and intradermal tests
 - k) Serum immunoglobulin levels
 - l) T and B cell quantitation and subtyping