

## Topic number 5

Occupational respiratory allergic diseases of the lungs.

### **Background**

Clinical syndrome of known etiology characterized by

1. Reversible airway obstruction
2. Allergic inflammation
3. Bronchial hyperactivity

### **Etiology**

1. Allergic asthma is caused by exogenous allergen in predisposed people.
2. Agricultural, stock breeding and processing of animal products
3. Food, wine and tobacco industries
4. Textile fabrics and tailoring
5. Production, packaging and usage of drugs
6. Hairdressing

### **Pathogenesis:**

#### Allergic occupational asthma pathogenesis:

1. Allergic reaction to an allergen with overproduction of IgE=
2. IgE combine with mast cells and lead to degranulation.
3. 4-8 hours later an allergic reaction develops
4. contact with allergen ,IgE binds with mast cells. emits mediators in delayed reaction 4 to 8 hours after with IgG.

#### Non-allergic occupational asthma pathogenesis.

1. Liberation of mediators of mast cells following repeated exposure to industrial agents.
2. Leukotriens are released in the lungs a constriction of airpassages.

The symptoms are familiar.

**Diagnosis:**Detection of allergens and irritants in the occupational air.Detection of risk factors.Medical records.Bronchodilatory tests.Chest X-ray.Exposure test to occupational allergens.Elevated Ige+eosinophil's

Sputum-eosinophil's may be present.Skin test.There is low value of FEV1 and FEV1/VC.