

## Third practical lecture

**Acute lung injury (ALI)** is a condition in which the lungs are not able to provide the body with sufficient amounts of oxygen.

### **Causes**

1. Presence of frothy exudates
2. Presence of neutrophils
3. Presence of necrosis
4. Presence of eosinophils

### **Symptoms**

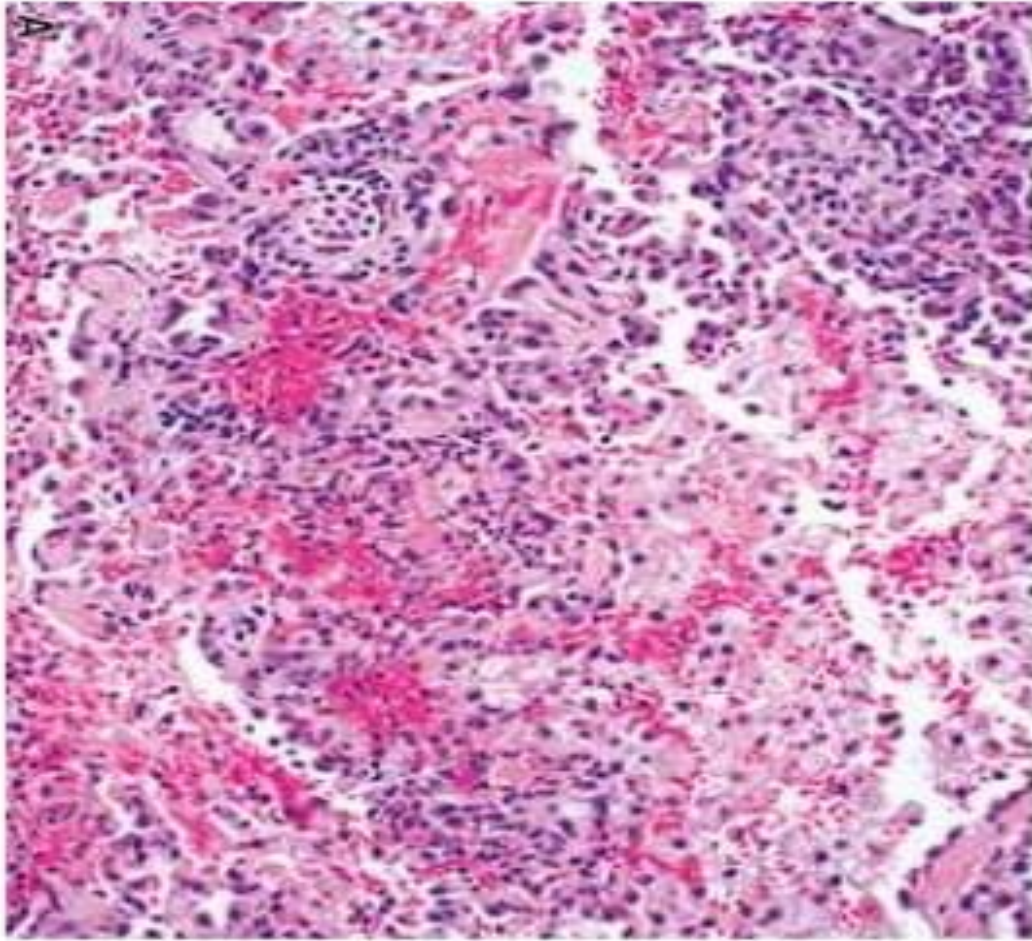
1. The acute onset of dyspnea (difficult breathing),
2. Decreased arterial oxygen pressure (hypoxemia)
3. Development of bilateral pulmonary infiltrates

## Diagnoses test And laboratory

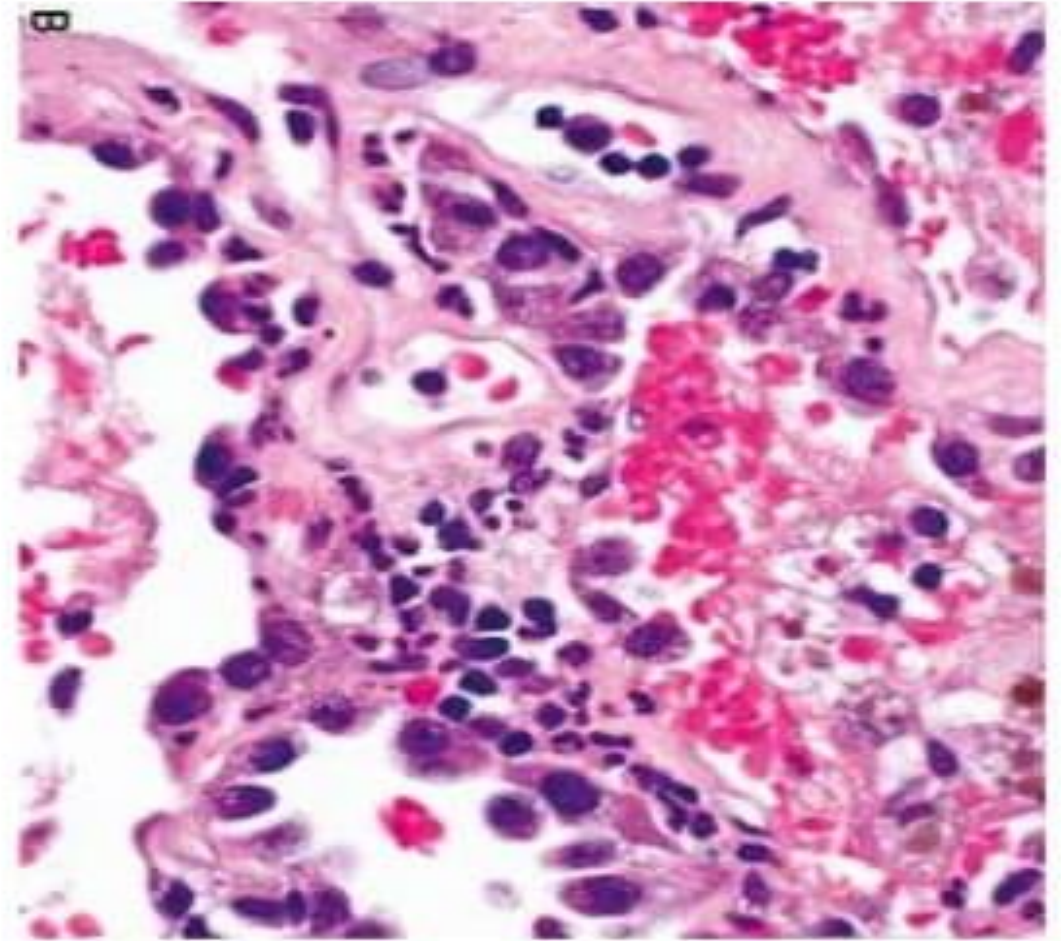
- physical exam ( $\text{PaO}_2/\text{FiO}_2$ ) 500 For healthy lung , less than 300
- Echo (Echocardiogram) unhealthy lung
- Oximetry
- Bronchoscopic biopsy
- Chest CT
- chest X-ray

### **Laboratory :**

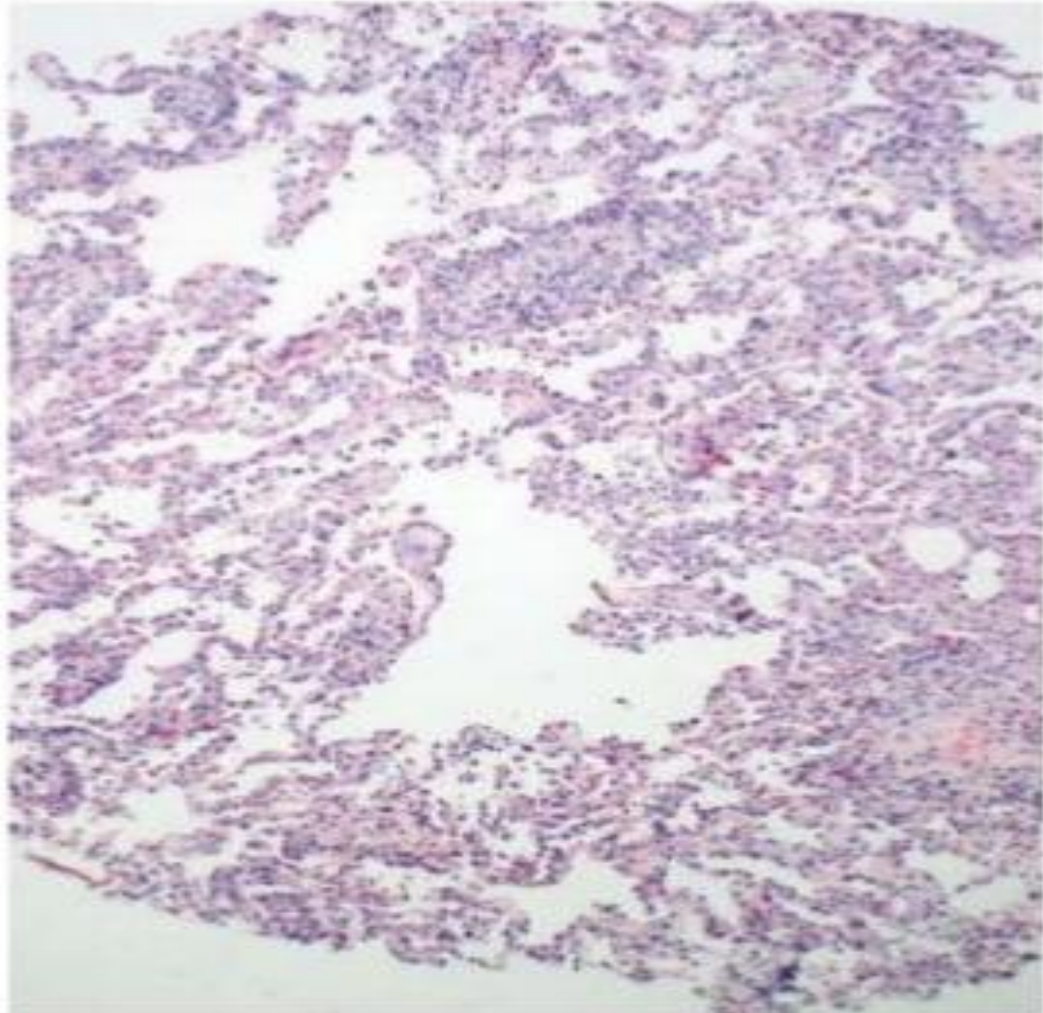
CBC , ABG , electrolytes test



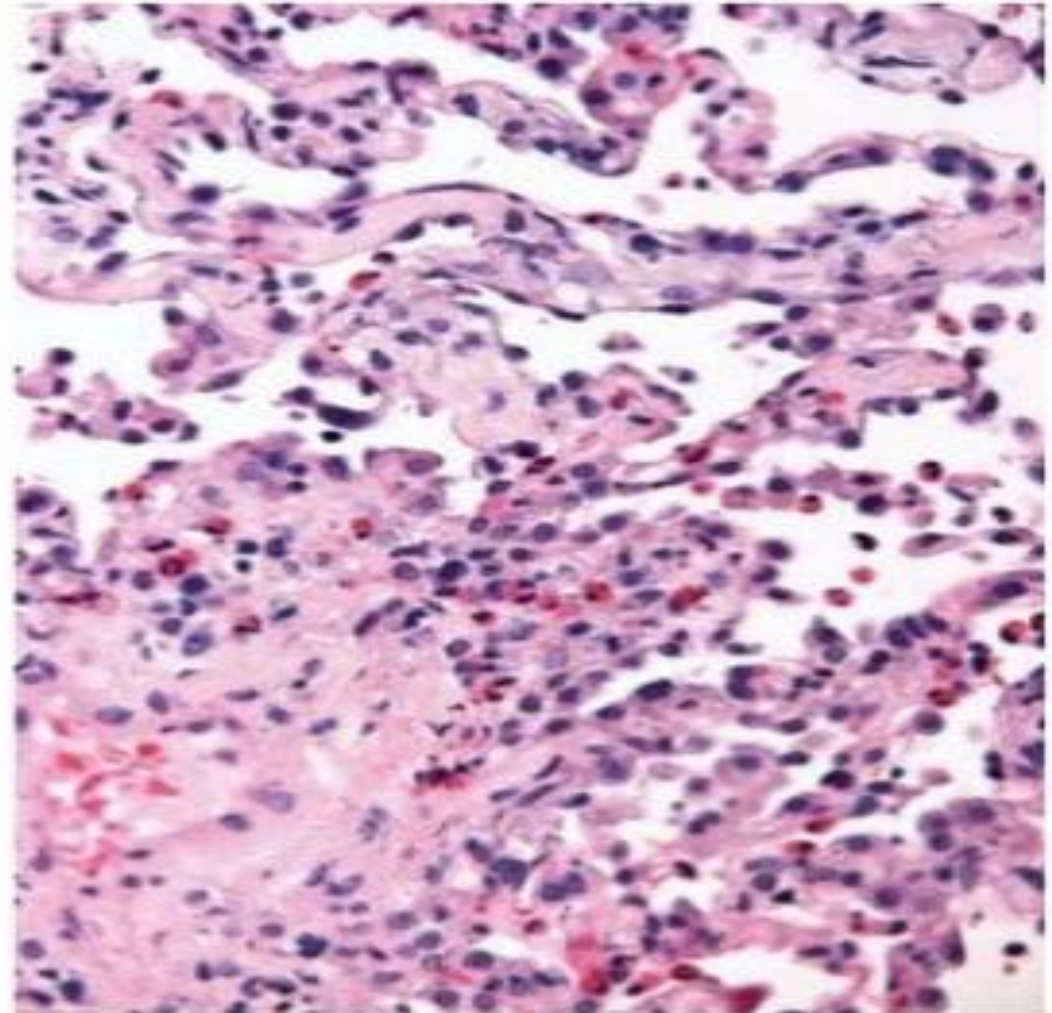
Diffuse Alveolar Hemorrhage



Neutrophilic capillaritis



Low power view of biopsy specimen with clinical features suggestive of eosinophilic pneumonia.



On closer inspection, abundant eosinophils are supportive of the diagnosis

## First practical lecture

### What is atelectasis?

The lungs are a pair of organs in your chest that take in air to deliver oxygen to your body. Atelectasis is the term for a collapse of one or more areas in the lung.

**When you breathe in**, your lungs fill up with air. This air travels to air sacs in your lungs (alveoli), where the oxygen moves into your blood. The blood delivers the oxygen to organs and tissues throughout your body.

**When air sacs become** deflated because of atelectasis, they cannot inflate properly or take in enough air and oxygen. If enough of the lung is affected, your blood may not receive enough oxygen, which can cause health problems.

## Causes

**Surgery:** Surgery is the most common reason people develop atelectasis. Medicine to keep you asleep during surgery (anesthesia) can affect your ability to breathe normally or cough because forming blood clot.

**Chest pressure:** Pressure from outside the lungs can make deep breathing difficult.

**Blocked airway:** A blocked airway can also cause atelectasis. If air cannot get past the blockage, the affected part of the lung could collapse. Mucus or an inhaled object could cause a blockage.

example : common in children that inhaled an objects ex. peanut or small toy part in to their lungs

## Symptoms

If atelectasis affects only a small area of the lungs, you may not have any symptoms. But if it affects larger areas, the lungs cannot fill with enough air, and the oxygen level in your blood may go down.

- Trouble breathing (shortness of breath)
- Increased heart rate
- Coughing
- Chest pain
- Skin and lips turning blue

## Diagnosis

1. [X-rays](#)
2. [computed tomography \(CT\)](#)