

فسلجة الامراض النظري  
المرحلة الثالثة  
الفصل الاول



كلية الرشيد الجامعة  
قسم الصيدلة  
٢٠١٩ - ٢٠١٨

# Disorders of The Respiratory System

Lec (6 + 7)

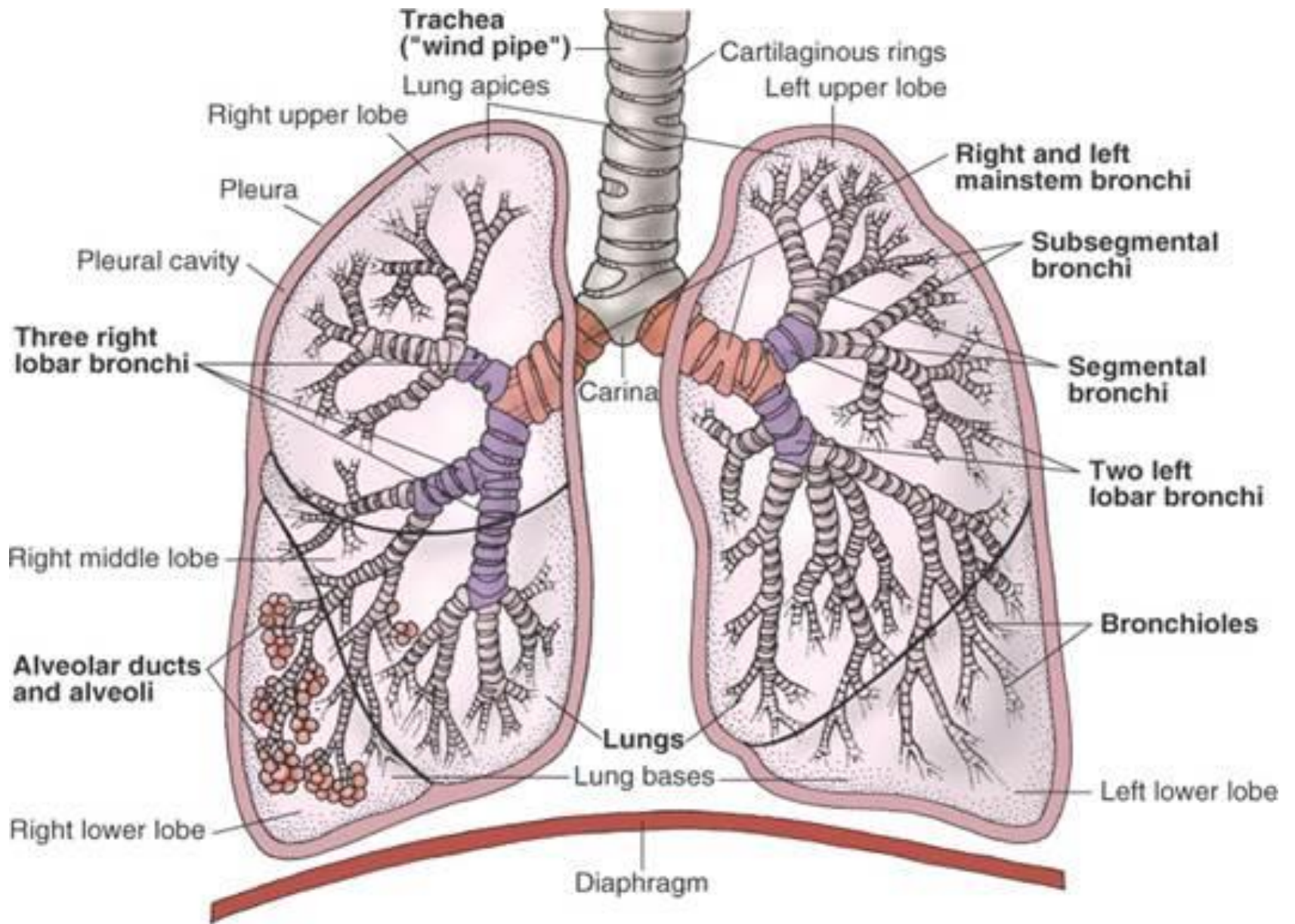
Assis. Prof. Dr. Muna Salih Daoud

# Introduction:

---

- ▶ The lungs are ingeniously constructed to carry out their main function, the exchange of gases between inspired air and blood.
- ▶ The respiratory system consists of :
  - ▶ The trachea
  - ▶ Lung buds
  - ▶ Lobar bronchi
  - ▶ Bronchioles
  - ▶ Terminal bronchioles
  - ▶ Acinus
  - ▶ Alveoli (the alveolar duct & alveolar sac)





# Pathological disorders of the RT:

---

- ▶ **Upper respiratory tract disorders (URD):** common cold, rhinitis, sinusitis, laryngitis, and pharyngitis
- ▶ **Lower respiratory tract disorders (LRD),** falls into 2 categories:
  - ▶ **Obstructive disorders** (chronic obstructive pulmonary diseases (COPD)), including: chronic bronchitis, asthma, emphysema and bronchiectasis
  - ▶ **Restrictive disorders:** including, pulmonary fibrosis and pneumonia



---

▶ **Other disorders including:**

- ▶ Pulmonary edema
- ▶ Pulmonary hypertension
- ▶ Adult respiratory distress syndrome
- ▶ Neonatal respiratory distress syndrome
- ▶ Atelectasis (pulmonary collapse)
- ▶ Lung cancer
- ▶ Tuberculosis



# 1- pneumonia:

---

- ▶ Results whenever the defense mechanisms are impaired or the host resistance get lowered.
  - ▶ Types of pneumonia:
    - ▶ Bronchopneumonia
    - ▶ Lobar pneumonia
  - ▶ Etiology:
  - ▶ Pathogenesis:
  - ▶ Morphological changes of lobar and bronchopneumonia:
  - ▶ Complications:
    - ▶ Abscess formation
    - ▶ Spread of infection to the pleural cavity
    - ▶ Organization of the exudate
    - ▶ Bacteremic dissemination
  - ▶ Clinical features
- 



## 2- emphysema:

---

- ▶ Abnormal permanent enlargement of the air space distal to the terminal bronchiole with destruction of their wall, there is no fibrosis
- ▶ Types of emphysema:
  - ▶ Centriacinar emphysema
  - ▶ Panacinar emphysema
  - ▶ Paraseptal emphysema
  - ▶ Irregular emphysema
- ▶ Etiology:
- ▶ Pathogenesis:
- ▶ Morphological changes:
- ▶ Clinical features:



## **3- chronic bronchitis:**

---

- ▶ It is characterized by cough and sputum production for at least 3 months in at least 2 consecutive years.
- ▶ Etiology:
- ▶ Pathogenesis:
- ▶ Morphological changes:
- ▶ Clinical features:





## 4- bronchial asthma:

---

- ▶ It is a chronic relapsing inflammatory disorder characterized by hyper-reactive airways, episodic, reversible bronchoconstriction due to increased responsiveness of the trachio-bronchial tree to various stimuli
- ▶ Types of asthma:
  - ▶ Extrinsic
  - ▶ Intrinsic
- ▶ Pathogenesis:
- ▶ Morphological changes:
- ▶ Clinical features:



## 5- bronchiectasis:

---

- ▶ Is a chronic necrotizing infection of the bronchi and bronchioles leading to or associated with abnormal permanent dilatation of these airways.
- ▶ Etiology:
- ▶ Pathogenesis:
- ▶ Complications:
- ▶ Morphological changes:
- ▶ Clinical features:

