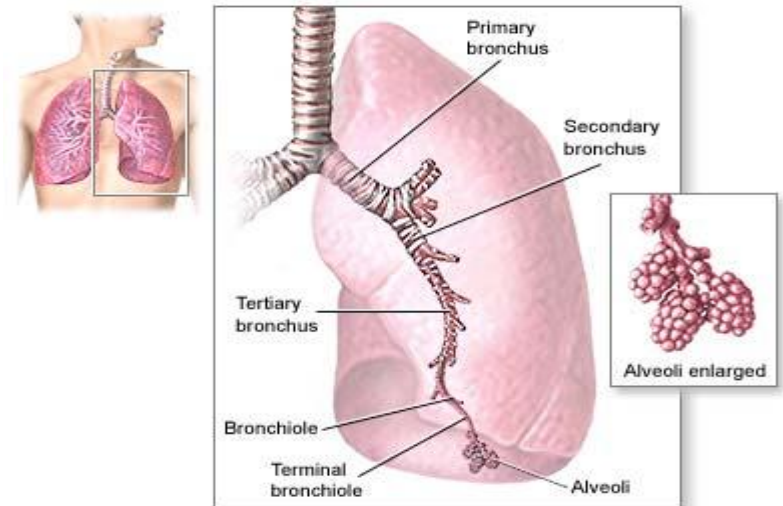


Anatomy & Physiology of Respiratory system

د مشتاق وتوت

Anatomical & physiological considerations:

- *gas exchange
- *inspired air travels through the nose & pharynx, where heated & humidified, filtering particulates $> 10 \text{ Mm}$.
- * entrance to the trachea through larynx which open during ventilation & closed by epiglottis during swallowing.
- *trachea divided into RT & LF bronchi
- *foreign body dislodge in RT bronchus.
- *bronchi ---- respiratory bronchioles ---- alveolar ducts--- alveoli .
- *respiratory zone:
- *type I pneumocytes:
- *type II pneumocytes: (surfactant)



Gas exchange

* ventilation perfusion diffusion

* *ventilation*: •

----outward elastic force of thoracic cage •

----inward elastic recoil of lung •

---- inhalation & exhalation •

---- muscles of respiration •

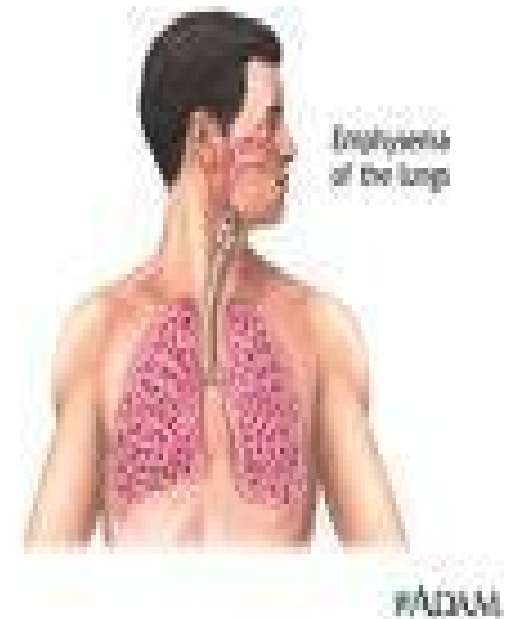
----ventilation depend on: •

1- resp control centers 2- respi effectors 3- resp sensors •

* RT to LF shunt not corrected by O₂ ????

* low conc of O₂ in copd ????? •

* •



Lung defense mechanisms

1- physical •

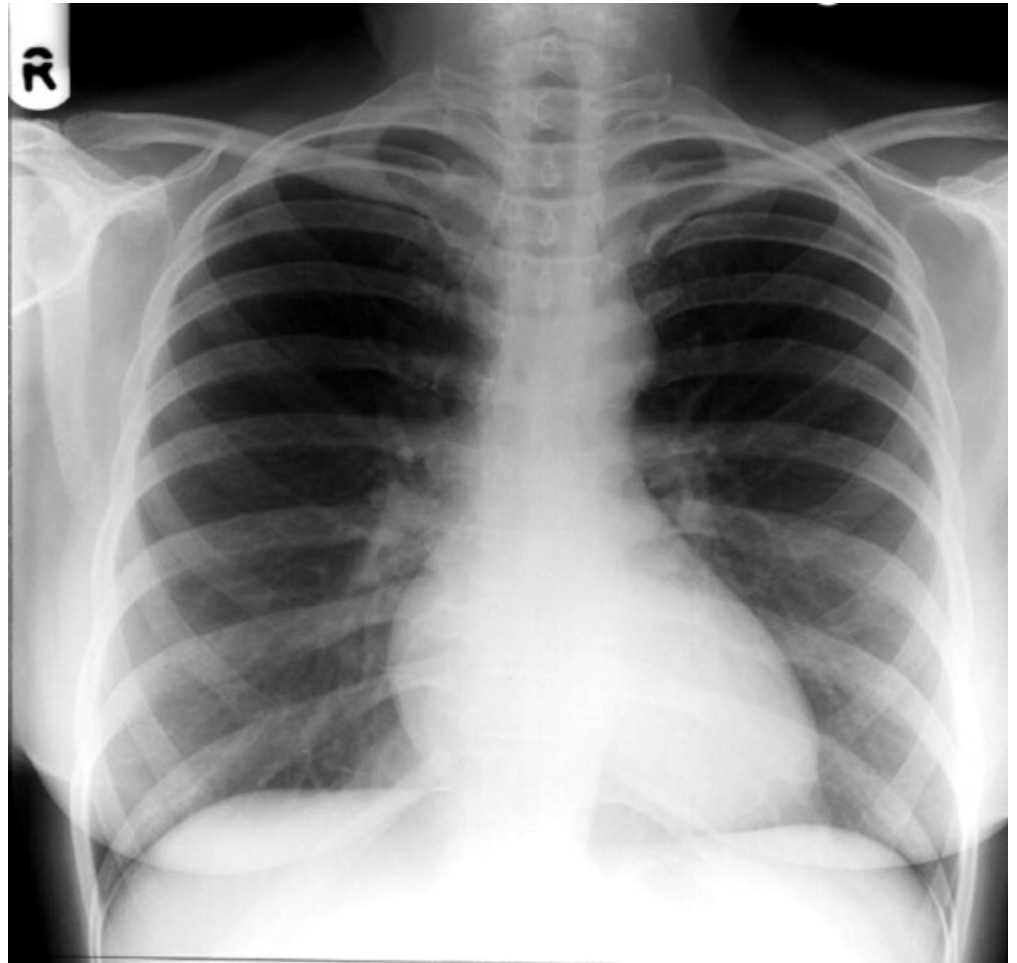
2- mucocilliary clearance •

3- surfactant & other defensive proteins •

Like IgA, G, M, complement, protinase inhibitors, MQ •



- *name&date
- *view
- *pateint's position
- *trachea
- *over or under pentration
- * sc
- *bone
- *lung tissue
- *costophrenic angle
- *cardiac chambers
- *cervical rib
- *under diaphragm



- () CT scan:
- ()MRI
- ()PET
- ()Pul angiography
- ()U/S
- ()Fluoroscopy
- ()V/P scanning
- ()oximetry
- ()bronchoscopy
- ()pleural biopsy , aspiration

