

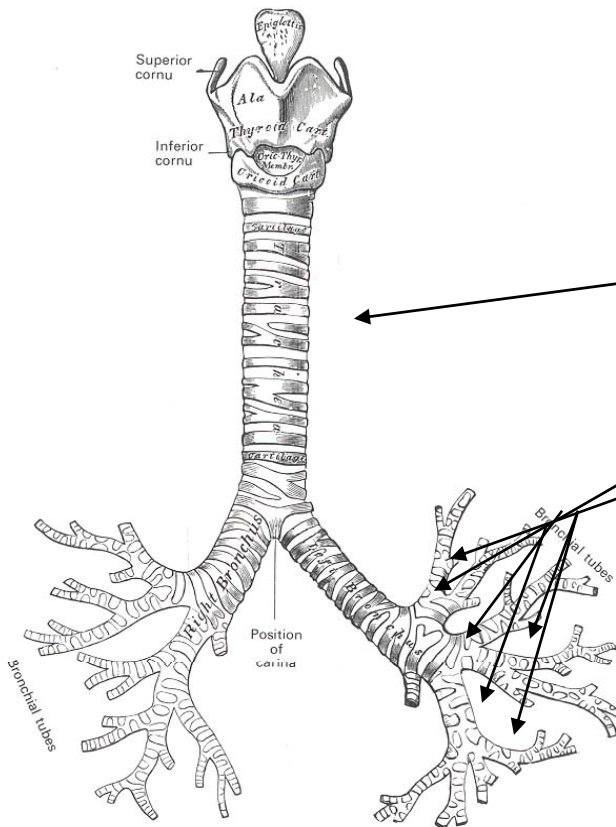
Pulmonary Function Tests

Wanida Paoim

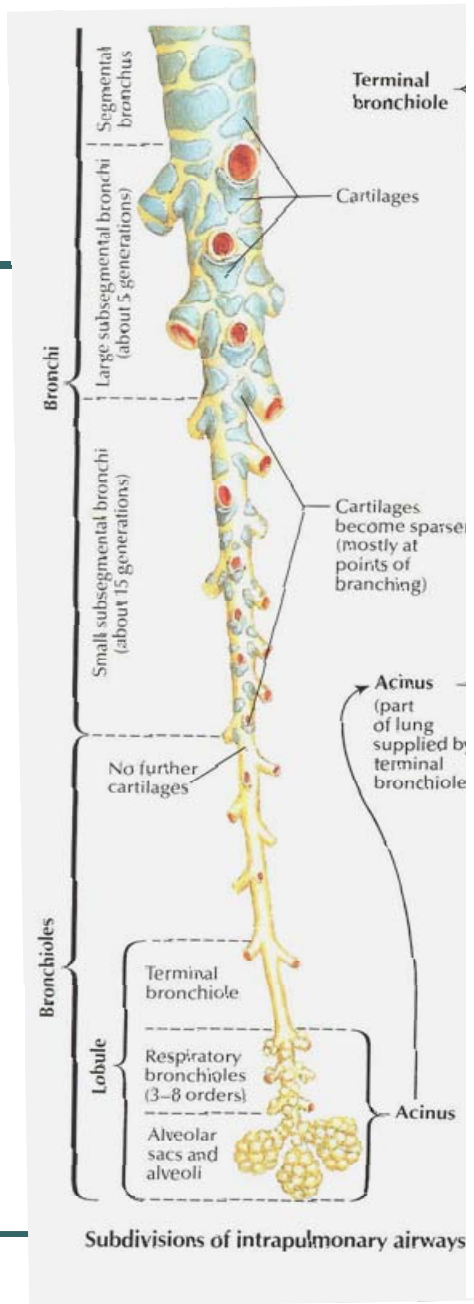
Objectives

- Review basic pulmonary anatomy and lung volume.
- Indication for PFTs.
- Technique and basic interpretation of spirometry.
- Difference between obstructive and restrictive lung disease.
- Clinically application

Conducting Airways



- Air travels via laminar flow through the conducting airways:
 - trachea,
 - lobar bronchi,
 - segmental bronchi,
 - subsegmental bronchi,
 - small bronchi,
 - bronchioles, and
 - terminal bronchioles.



From Netter
Atlas of
Human
Anatomy,
 1989

Gas Exchange

- Capillaries are wrapped around alveoli.
- Approximately 300 million alveoli
- Alveolar-capillary barrier: 0.3 μm in some places, surface area of 50-100 square meters! (size of a tennis court)



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