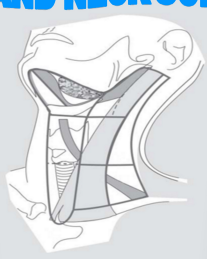
PHARYNGEAL AND LARYNGEAL A&P

NAT'S NOTES IN OTOLARYNGOLOGY HEAD AND NECK SURGERY



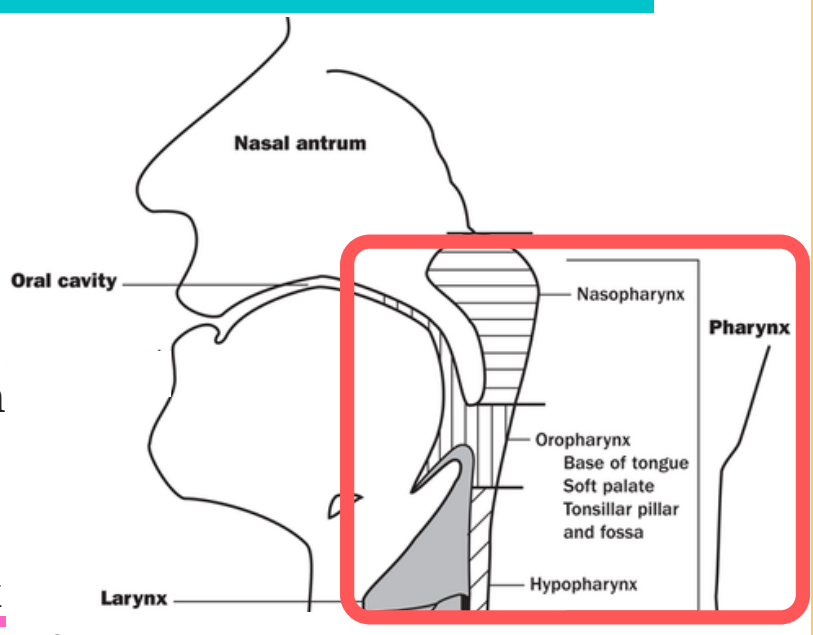
Episode 31.1

UPPER AIRWAY

- Components: nasal cavities, nasopharynx, oropharynx, hypopharynx, larynx
- Complex interaction between respiration and swallowing
- > 2 yrs of age, larynx descends into neck with elongation of hypopharynx. Uvula (soft palate) and epiglottis are now separated --> swallowing more complex now

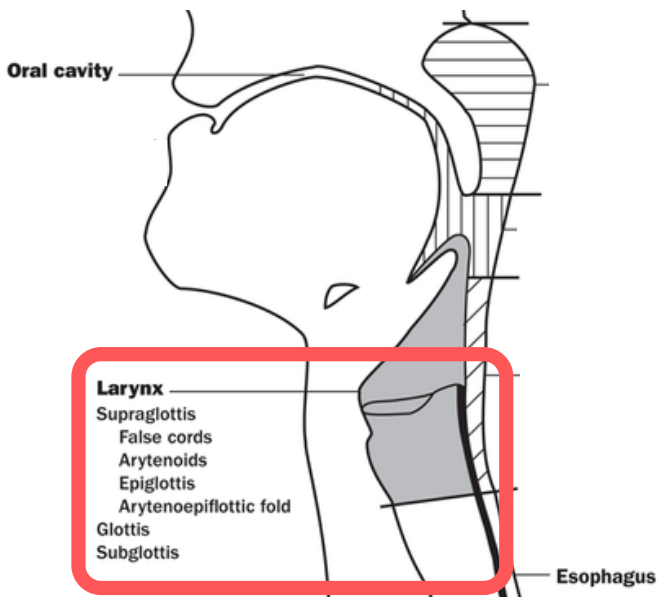
PHARYNX

- Posterior / lateral walls formed by 3 constrictor muscles. Muscles constrict during swallowing & dilate lumen during inspiration
- Segments: nasopharynx, oropharynx, hypopharynx



- Participates in respiration [filters, warms and conducts air into lungs], digestion [safely passes food from oral cavity to esophagus], equalizes air pressure via the Eustachian tubes, and houses lymphatic tissue for immunomodulation

LARYNX

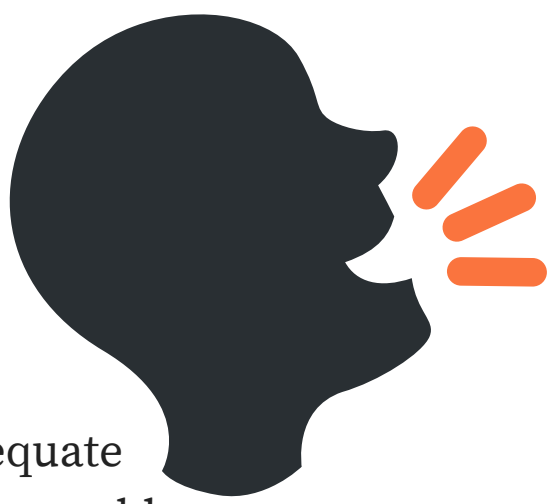


- Divided into supraglottis, glottis and subglottis
- Bony and cartilaginous support: hyoid bone, epiglottis, thyroid and cricoid cartilages, arytenoids, corniculate and cuneiform cartilage

RESPIRATION & PHONATION!

- Extrinsic, intrinsic and accessory muscles move structures. Innervated by CN X --> recurrent & superior laryngeal nerves

SPEECH



- 4 components of speech:
1) generator (lungs produce airflow)
2) phonation (sound through the VC)
3) resonance (modulation of sound)
4) articulation (formation of sounds)
- For phonation, need 5 things: a) adequate breath, b) approximation of VC, c) favourable phonation, d) favourable VC shape, e) control of VC length