

Lower Respiratory Tract -Handout(1)

Trachea

X Extends from cricoid cartilage (of the larynx)-at the level of C6- to carina at the level of T4-T5 (angle of Louis) .

Larynx cartilages :

3 single → epiglottic , thyroid , cricoid

3 paired → arytenoid , corniculate , cuneiform .

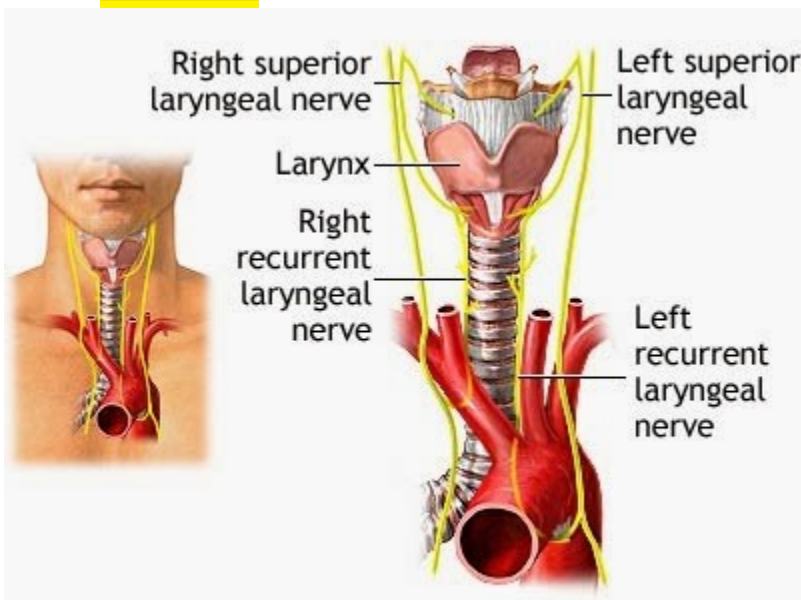
X Trachea terminates at the level of the sternal angle as : Rt and Lt primary bronchi .

X Trachea is composed of 4 layers : Mucosa → Submucosa → Hyaline Cartilage → Adventitia

X Num of cartilage rings of trachea : 16-20 (incomplete , C shaped, deficient post) .

X Posteriorly , the trachea faces oesophagus , and a muscle called Trachealis bridges the gap b/w the free end of the C-shaped cartilage and oesophagus .

X Innervation :



→ Sensory nerve supply of trachea : Vagi + recurrent laryngeal nerves

→ Recurrent laryngeal nerves supply all intrinsic muscles of the larynx EXCEPT Cricothyroid (supplied by Superior laryngeal nerve)

→ There are 2 recurrent laryngeal nerves ; branches from vagus n, Lt recurrent and Rt recurrent laryngeal nerves .

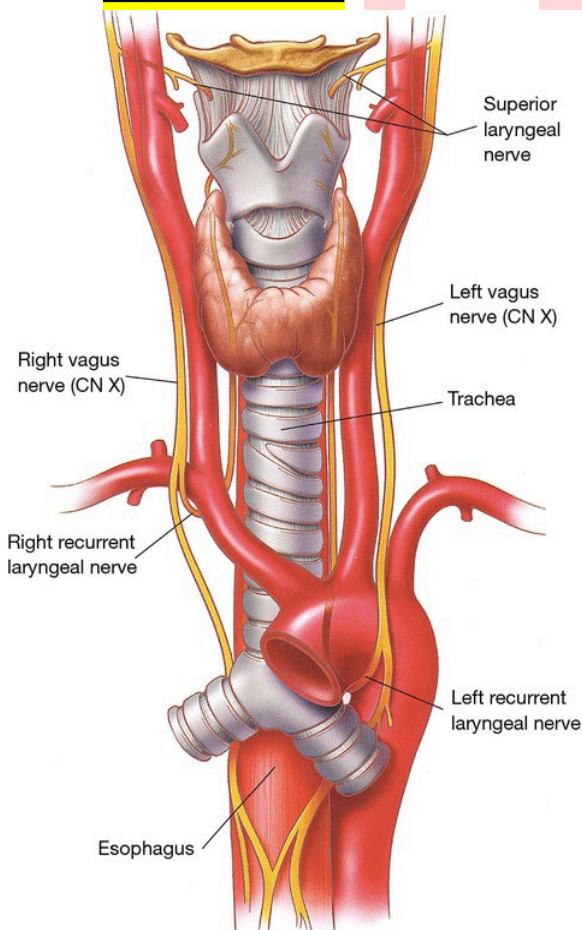
X Rt and Lt recurrent nerves are asymmetrical ; where the Lt loops under the aortic arch and the Rt under the Rt SCA .

X Blood Supply :

1. Upper 2/3rd → Inferior Thyroid a (branch of thyrocervical trunk of the SCA).

2. Lower 1/3rd → Bronchial aa (branch of thoracic aorta)

X Lymphatic Drainage : Pretracheal → Paratracheal → Deep Cervical



Relations of cervical part of trachea

Anteriorly →

☆ Pretracheal Fascial

☆ Skin

Anterolateral →

☆ Infrahyoid muscle

☆ Extrinsic muscles of the larynx

☆ Thyroid gland

Posterior →

☆ Oesophagus

Posterolateral →

☆ Lt&Rt recurrent laryngeal nerves

☆ Carotid sheath

(M ► L : Common Carotid a , Vagus n , Internal Jugular v , Deep cervical LNs)

X Relations of trachea in the thorax

(1) Ant (slightly to the lt) → ant part of the aortic arch

☆ In other words ; trachea is post to the Rt in relation w/ the aortic arch

(2) Ant(to the right) → SCV and Rt phrenic n

(3) Lateral → Apexes of the lungs

(4) Post → Oesophagus , Vagi

(5) Posterolateral → Lt recurrent laryngeal n

