2015-1-24 Outline the anatomy of the larynx

Cartilages
- Unpaired
  - Thyroid cartilage – Level of C4~5
  - Cricoid cartilage
  - Epiglottis
- Paired
  - Arytenoid
  - Cuneiform
  - Corniculate

Muscles
- Intrinsic
  - Cricothyroid
    - Originates in cricoid cartilage and inserts into thyroid
    - Tenses vocal cords and elevates voice
  - Thyroarytenoid
    - Originates in thyroid cartilage and inserts into arytenoid cartilage
    - Relaxes vocal cords and depresses voice
  - Posterior cricoarytenoid
    - Abducts the vocal cords
  - Lateral cricoarytenoid
    - Adducts the vocal cords
  - Oblique and transverse arytenoids
    - Adducts the vocal cords
- Extrinsic
  - Strap muscles

Innervation
Sensory
- Internal branch of superior laryngeal nerve
Motor
- Cricothyroid – External branch of the superior laryngeal nerve
- All other intrinsic muscles – Recurrent laryngeal nerve

Blood supply
- Superior laryngean artery (branch of external carotid)
- Inferior laryngeal artery (branch of thyrocervical trunk from subclavian artery)

Associations
- The thyroid glands lie inferolateral to the larynx (lateral to the cricoid, the isthmus is inferior to the cricoid)
- The oesophagus, anterior longitudinal ligament, cervical vertebrae lies posterior to the larynx
- The brachiocephalic trunk may arch superiorly close to the cricothyroid membrane in an anatomical variant
Examiners Comments

13 % of candidates passed this question.

It was expected that an answer would include the names of the three single and three paired laryngeal cartilages, intrinsic and extrinsic muscles (names were not required), nerve supply (motor and sensory) and blood supply. Many candidates had good illustrations though a drawing was not essential.

The majority of candidates failed to name the laryngeal cartilages. There was much confusion about whether certain structures were bones or cartilage or even muscle. The relation of the larynx to the thyroid gland was frequently misunderstood.

Many answers focussed on the relations of the larynx but omitted basic information about the larynx itself. No marks were awarded for the contents of the carotid sheath or the course of the recurrent laryngeal nerve both of which were frequently included in answers.