

Larynx

The larynx is attached to the first ring of the trachea and is suspended ventral to the esophagus by the hyoid apparatus.

Structurally, it is formed by

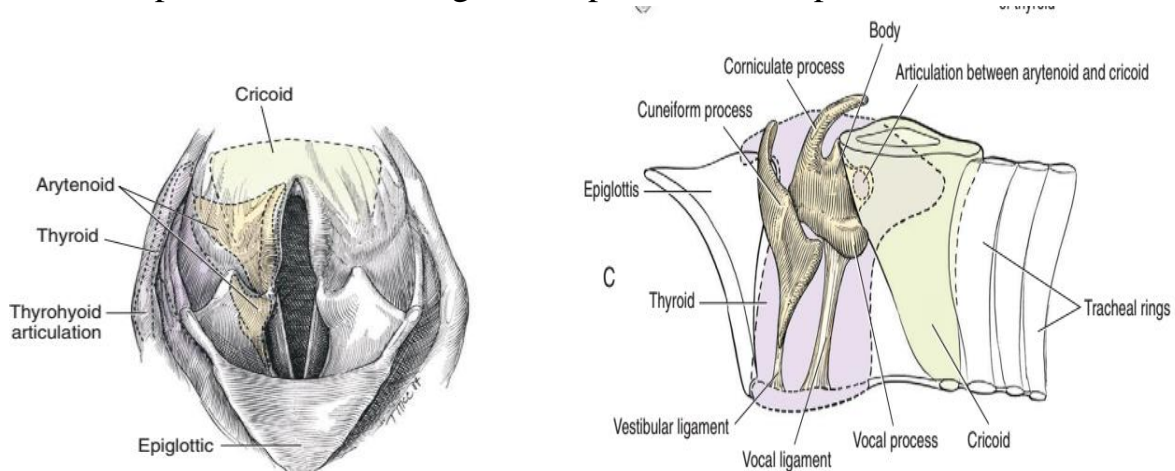
- 1- epiglottic,
- 2- thyroid,
- 3- cricoid,
- 4- paired arytenoid cartilages.

The epiglottis is the rostral most cartilage. dorsal rostral surface of the thyroid cartilage.

The thyroid cartilage is the largest laryngeal cartilage. It consists of right and left laminae that cover the sides of the larynx.

The cricoid cartilage forms a complete ring that is connected caudally to the first tracheal ring.

The paired arytenoid cartilages consist of cuneiform, corniculate, vocal, and muscular processes. The triangular shaped cuneiform process is the mostrostral.

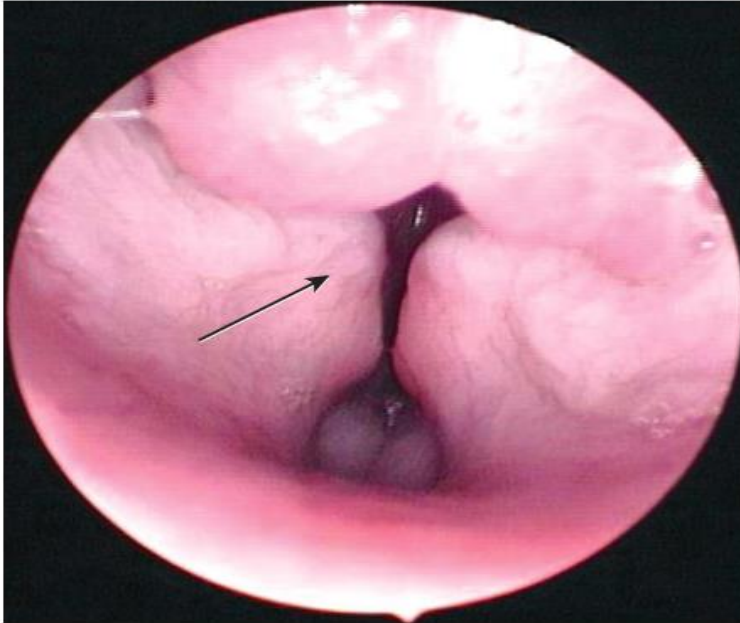


LARYNGEAL COLLAPSE

Laryngeal collapse is a form of upper airway obstruction caused by loss of cartilage rigidity that allows medial deviation of the laryngeal cartilages.

Laryngeal collapse occurs secondary to chronic upper airway obstruction or trauma. Trauma may fracture or disrupt the laryngeal cartilages and allow

medial collapse. Laryngeal collapse most often is caused by chronic upper airway obstruction (e.g., brachycephalic syndrome, laryngeal paralysis) and cartilage fatigue or degeneration.



Partial Laryngectomy

Technique

- 1- The animal is placed in sternal recumbency with the head suspended by the maxilla.
- 2- The mandible is held open with a mouth gag or tape, and the tongue is held extended.
- 3- The soft palate is elevated, and the base of the tongue is depressed with malleable retractors to expose the rima glottidis.
- 4- Long instruments (thumb forceps, Metzenbaum scissors, and scalpel handle) and a 30- to 35-cm-long cup biopsy forceps facilitate the procedure.
- 5- the corniculate process is grasped and retracted medially with the biopsy forceps, and the longhanded scalpel is used to excise the process

Ventral Laryngotomy for Partial Laryngectomy

Technique.

- 1- The animal is positioned in dorsal recumbency, and the head and neck are extended and secured to the operating table.

- 2- A ventral midline skin incision is made over the larynx.
- 3- The sternohyoideus muscles are separated on the midline and retracted laterally with Gelpi retractors.
- 4- The cricothyroid membrane and thyroid cartilage are incised on the midline, and the edges are retracted with small Gelpi retractors to expose the arytenoid cartilages and vocal folds.
- 5- The mucosa is incised over the corniculate, cuneiform, and vocal processes of one arytenoid cartilage, and the structures are excised with scissors or a scalpel blade.
- 6- Any redundant mucosa is excised, and the mucosal defect is sutured with 5-0 or 6-0 monofilament, rapidly absorbable material in a continuous pattern.
- 7- The opposite vocal cord and process can be removed and the mucosal defect sutured. The thyroid cartilage incision is reaposed with nonabsorbable interrupted sutures that do not penetrate the laryngeal lumen.
- 8- The subcutaneous tissue and skin are routinely closed.