HN32

THE PHARYNX



Posterior view of the neck where the posterior wall of the pharynx has been split along the midline and spread apart to show the internal aspect of the anterior wall of the pharynx: the nasal part (nasopharynx), the oral part (oropharynx) and the laryngeal part (laryngopharynx). Note the laryngeal inlet (aditus) is bounded by the aryepiglottic fold, epiglottis and inter-aryepiglottic fold.

- 1. Base of skull
- 2. Choana (posterior nasal aperture)
- 3. Tubal elevation
- 4. Pharyngotympanic tube opening
- 5. Soft palate
- 6. Uvula
- 7. Posterior 1/3 of the tongue (pharyngeal part)
- 8. Salpingopharyngeal fold
- 9. Palatopharyngeal fold
- 10. Vallecula
- 11. Palatine tonsil
- 12. Epiglottis
- 13. Aryepiglottic fold
- 14. Laryngeal inlet
- 15. Piriform fossa
- 16. Common carotid artery
- 17. Rima glottidis
- 18. Vocal fold
- 19. Interarytenoid incisure

The pharynx is a muscular tube, which is continuous inferiorly with the oesophagus, and into which the nasal, oral and laryngeal cavities open. For descriptive purposes the pharynx is divided into nasopharynx, oropharynx and laryngopharynx.

The nasopharynx is attached to the base of the skull and is bounded anteriorly by the choanae. Inferiorly it is continuous with the oropharynx at the level of the soft palate. This part of the pharynx is lined with respiratory epithelium; ciliated pseudostratified columnar epithelium with goblet cells.

The oropharynx begins anteriorly at the palatoglossal ridge and extends inferiorly to the level of the upper border of the epiglottis where it is continuous with the laryngopharynx.

The laryngopharynx lies behind the laryngeal inlet, the arytenoids and the cricoid lamina, and on either side of the inlet forms recesses, the piriform fossae.

At the inferior border of the cricoid cartilage, it is continuous with the oesophagus. The musculature of the pharynx consists of incomplete outer circular, and inner longitudinal layers. The pharyngobasilar fascia lies internal to the muscles and is lined by a mucous membrane.

CLINICAL CONSIDERATIONS

Foreign objects such as a piece of fish bone may be stuck at the "piriform fossa" causing pain sensation. What is the sensory innervation to the fossa?

Laryngeal papillomas are benign epithelial tumours that are caused by infection with the human papilloma virus (HPV).

Question(s)

- What is the lining epithelium of the vocal fold and the remaining laryngeal cavity?
- What is the innervation of the laryngeal muscles?
- What is the sensory innervation of the laryngeal mucous membrane?
- What are the muscles involved in abduction and adduction of the vocal cords?
- What are the sphincters of the laryngeal inlet?
- What is the lining epithelium of the palatine tonsil?