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Head and Neck

Pharynx and Larynx

This worksheet will help review muscles, vasculature, and nerve supply of the pharynx and larynx.

Part I. Matching: Use the bank and indicate the appropriate letter next to each description. Some options may be used more than once or not at all.

A. Buccopharyngeal fascia
B. Chorda tympani nerve
C. CN IX
D. CN X
E. CN XI
F. CN XII
G. Corniculate cartilage
H. Cricoid cartilage
I. Cuneiform cartilage
J. Deep lingual artery
K. Dorsal lingual artery
L. Epiglottic vallecula
M. Ethmoidal sinus
N. Facial vein
O. Fauces
P. Foramen cecum
Q. Frontal sinus
R. Hard palate
S. Inferior nasal concha
T. Infraglottic cavity

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U. Laryngeal saccule
V. Laryngeal ventricle
W. Laryngopharynx
X. Lingual artery
Y. Lingual nerve
Z. Lingual vein
AA. Maxillary sinus
BB. Middle nasal concha
CC. Nasopharynx
DD. Oropharynx
EE. Otic ganglion
FF. Pharyngeal tonsil
GG. Pharyngobasilar fascia
HH. Piriform fossa (recess)
II. Pterygopalatine ganglion
JJ. Quadrangular membrane
KK. Recurrent laryngeal nerve
LL. Retromandibular vein
MM. Soft palate
NN. Sphenoid sinus
OO. Sublingual artery
PP. Submandibular ganglion
QQ. Superior cervical ganglion
RR. Superior laryngeal nerve
SS. Superior nasal concha
TT. Terminal sulcus
UU. Thyroid cartilage
VV. Thyrohyoid membrane
WW. Torus levatorius
XX. Torus tubarius
YY. Vestibule
ZZ. NONE OF THE ABOVE

1. The semilunar hiatus is most closely associated with this concha.
2. This sinus is inferior to the hypophyseal fossa.
3. Parasympathetic fibers that ultimately lead to innervation of the nasal cavity synapse in this ganglion.
4. This fascia anchors the pharynx to the occipital base.
5. Section of the pharynx that communicates anteriorly with the oral cavity and extends from the soft palate to the epiglottis.
6. Innervation of muscularis uvulae.

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7. Innervation of the stylopharyngeus muscle.
8. Bundle of lymphoid tissue found on the roof of the nasopharynx.
9. Depression on the lateral wall of the laryngopharynx on either side of the entrance to the larynx.
10. The most inferior laryngeal cartilage and completely encircles the airway.
11. The apex of the arytenoid cartilage articulates with this cartilage.
12. An aperture within the lateral aspect of this structure allows for passage of the superior laryngeal artery and the internal branch of the superior laryngeal nerve.
13. The aryepiglottic folds enclose the superior margins of this structure.
14. Anterosuperior blind ended pocket of ventricle.
15. This nerve descends medially to the ICA and divides into internal and external branches.
16. This structure is formed by the palatine process of the maxilla and the horizontal plates of the palatine bones.
17. Presynaptic parasympathetic fibers from the greater petrosal nerve synapse in this ganglion to provide motor innervation to the palatine glands.
18. Space between the oral cavity and pharynx bounded laterally by the palatoglossal and palatopharyngeal arches.
19. V-shaped groove on the tongue.
20. This nerve passes deep to the mylohyoid muscle to enter the floor of the mouth, and passes between the mylohyoid and hyoglossus muscles to enter the sublingual region.
21. This nerve provided both GSA and SVA to the anterior ⅔ of the tongue.
22. This structure is suspended from the lingual nerve at the posterior border of the hyoglossus muscle.
23. This nerve travels posterior to the stylopharyngeus muscle and passes between the superior and middle pharyngeal constrictors to be located by the palatine tonsils.
24. This artery supplies the body of the tongue.
25. This vein passes deep to the hyoglossus muscle and ends in the internal jugular vein.

Part II. True or False? If the statement is false, correct it to make it true.

26. The predominant arterial suppliers of the nasal cavity are the sphenopalatine and greater palatine arteries.
27. When viewing the external surface of the posterior pharyngeal wall, the vagus nerve is just medial to the sympathetic trunk, and the accessory nerve is the most lateral structure.
28. The tendon of the tensor veli palatini muscle hooks under the pterygoid hamulus of the medial pterygoid plate to form the palatine aponeurosis.
29. The quadrangular membrane runs between the lateral margin of epiglottis and anterolateral surface of arytenoid cartilage.
30. The cricoarytenoid ligament begins inferiorly as a median ligament and thickens superiorly as the vocal ligament.
31. The interval between vestibular folds is called the rima glottidis.
32. The recurrent laryngeal nerve provides GSA to the intrinsic laryngeal muscles (except cricothyroid muscle) and SVE to the mucosa in the laryngeal cavity below the vocal folds.

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33. The inferior thyroid artery ascends with the recurrent laryngeal nerve in the tracheoesophageal groove.
34. The most numerous type of papillae on the tongue is the filiform papillae.
35. The lingual nerve is inferior to the hypoglossal nerve.
36. Regarding the submandibular gland, the superficial portion is located in the submandibular triangle, and the deep portion is within the oral cavity between the hyoglossus and mandible.

Part III. Short Answer

Fill in the following tables.

37. Pharynx: External Muscles

	Origin	Insertion	Action	Innervation
Superior Pharyngeal Constrictor				
Middle Pharyngeal Constrictor				
Inferior Pharyngeal Constrictor				

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38. Pharynx: Internal Muscles

	Origin	Insertion	Action	Innervation
Stylopharyngeus				
Salpingopharyngeus				
Palatopharyngeus				

39. Nasopharynx Muscles

	Origin	Insertion	Action	Innervation
Tensor veli palatini				
Levator veli palatini				

40. Nerve supply to the palate

	Foramen	Innervation	Artery it travels with
Nasopalatine			
Greater palatine			
Lesser palatine			

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41. Extrinsic Muscles of Tongue

	Origin	Insertion	Action	Innervation
Genioglossus				
Hyoglossus				
Styloglossus				
Palatoglossus				

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42. Intrinsic Laryngeal Muscles

	Origin	Insertion	Action	Innervation
Cricothyroid				
Posterior Cricoarytenoid				
Lateral Cricoarytenoid				
Interarytenoid: Transverse and oblique arytenoid				
Thyroarytenoid				
Vocalis				