

# VIVAs NECK

## Larynx

TOPIC: Larynx \_\_\_\_\_ NUMBER: L3 \_\_\_\_\_

OPENING QUESTION	Identify the structures visible on front of this model	COMMENTS
POINTS REQUIRED	1 Thyroid Cartilage	All 7 to pass
	2 Cricothyroid membrane	
	3 Trachea	
	4 Thyroid	
	5 Hyoid	
	6 Thyrohyoid Membrane	
	7	
PROMPTS	Where is the cricoid cartilage?	
SECOND QUESTION (if needed)	What is the motor nerve supply of the larynx?	
POINTS REQUIRED	1 Recurrent laryngeal except	RLN = absolute minimum
	2 Cricothyroid = External Laryngeal	
	3	
	.	

Question 2: Larynx	Using the model, demonstrate the main features of the larynx. Remove left side of mandible and tongue.	<ol style="list-style-type: none"> <li>From epiglottis to inf border of cricoid</li> <li>Cartilages(9). <u>Thyroid</u>: sup/inf horns/oblique line/laryngeal prominence/laminae/thyroid notch. <u>Cricoid</u>: cricothyroid joint-&gt;allows change in length of vocal cords. <u>Epiglottis</u>, <u>Cuneiform</u> and <u>Corniculate(paired)</u>, <u>Arytenoid(paired)</u></li> <li>Membranes: Thyrohyoid and median cricothyroid</li> <li>Ligaments: Cricotracheal/med and lat cricothyroid. Aryepiglottic/thyroepiglottic. Med and lat thyrohyoid</li> </ol>	<p>Need all to pass Thyroid cartilage Cricoid cartilage Epiglottis Cricothyroid membrane Location of the arytenoids</p>
	What is the motor innervation of the muscles of the larynx	<p><u>Extrinsic</u>: Infrahyoid/suprahyoid/stylopharyngeus. CNX Recurrent laryngeal &gt; sup and inf laryngeal <u>Intrinsic</u>: CNX &gt; rec. laryngeal supplies all except cricothyroid supplied by ext branch of sup. Laryngeal. Principal adductors: lat. cricoarytenoid(plus trans and oblique arytenoids) Principal abductors: post cricoarytenoid</p>	<p>To pass: Recurrent laryngeal nerve</p>

		<p>Tensor: cricothyroid Relaxer: Thyroarytenoid Sphincters: Action of most other than post cricothyroid</p>	
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ACEM 2008.1 PRIMARY VIVA EXAMINATION

SUBJECT: ANATOMY

TOPIC: MODEL ; Muscles of vocalisation / Nerve supply NUMBER: Thurs am/ Q2 \_\_\_\_\_

OPENING QUESTION		COMMENTS
	On this model identify the structures of the larynx and upper airway.	
<b>POINTS REQUIRED</b>	1 Thyroid cartilage	Identify 6 to pass
	2 Cricoid cartilage	
	3 Cricothyroid membrane	
	4 Cricothyroid muscle	
	5 Epiglottis	
	6 Vocal cords; vocal folds	
	7 Aryepiglottic folds; vallecula	
<b>PROMPTS</b>		
<b>SECOND QUESTION (if needed)</b>	Name the muscles of vocalisation.	
<b>POINTS REQUIRED</b>	1 Cricothyroid ; Anterolateral cricoid to inf margin and inf horn of thyroid. (Ext laryngeal nn)	** to pass
	2 Thyroarytenoid ; Lower 1/3 post angle of thyroid laminae and cricothyroid lig to anterolateral arytenoid (Inferior laryngeal nn)	
	3 Post cricoarytenoid ; Post surface of cricoid laminae to vocal process of arytenoid. (inf lary nn)	
	4 Lat cricoarytenoid ; Arch of cricoid to vocal process of arytenoid. (inf lary nn)	
	5 Transverse and oblique arytenoids ; One arytenoid cart to contralateral arytenoid (inf lary nn)	
	6 Vocalis ; Lat surface vocal process of arytenoid cart to ipsilateral vocal lig	
<b>PROMPTS</b>		
<b>THIRD QUESTION (if needed)</b>	Please describe the nerve supply to the intrinsic laryngeal nn (nn of vocalisation)	
<b>POINTS REQUIRED</b>	1 All except cricothyroid supplied by recurrent laryngeal nn. **	
	2 Recurrent laryngeal nn is a branch of CN X	** main points
	3 Cricothyroid supplied by external laryngeal nn. **	
	4 External laryngeal nn is one of the 2 terminal branches of the superior laryngeal nn	
<b>PROMPTS</b>		

**ACEM 2007.2 PRIMARY VIVA EXAMINATION**

**SUBJECT: ANATOMY 7 September 2007 am.**

**TOPIC: X-ray: Lateral C spine \_\_\_\_\_ NUMBER: 1 \_\_\_\_\_**

**ACEM 2007.1 PRIMARY VIVA EXAMINATION**

**SUBJECT: ANATOMY**

**TOPIC: X ray lateral neck \_\_\_\_\_ NUMBER: \_\_\_\_\_**

OPENING QUESTION	Identify the structures shown in this xray	COMMENTS
POINTS REQUIRED	1.nasopharynx/posterior aspect of tongue / soft palate	
	2 retropharyngeal soft tissue	6 to pass
	3 trachea/oesophagus	
	4 epiglottis	
	5 vallecula	
	6 vestibular fold/vocal fold	
	7 Bony: C1, C2, BOS, Mandible, Spinous processes, Laminae, Disc spaces, Larynx, Hyoid, Trachea	
	8. cartilage: thyroid	
PROMPTS	What soft tissue / bony structures can you identify?	
SECOND QUESTION (if needed)	Demonstrate the boundaries of the spinal canal on this xray	
POINTS REQUIRED	1	

OPENING QUESTION	Demonstrate the bony features of C1 and C2 vertebrae evident on this Xray	COMMENTS
POINTS REQUIRED	1 Odontoid peg (dens)	5/8 including dens to pass
	2 Bodies of C1 and C2	
	3 anterior and posterior arches of atlas	
	4 laminae and inferior articular process	
	5 spinous process	
PROMPTS		
SECOND QUESTION (if needed)	What are the components of the soft tissue shadow located anterior to the upper cervical vertebrae?	
POINTS REQUIRED	1 Anterior longitudinal ligament	3/6 to pass including retropharyngeal space
	2 Longus colli muscle	
	3 Prevertebral fascia	
	4 Retropharyngeal space	
	5 Buccopharyngeal fascia	
	6 Pharyngeal muscle	

TOPIC	QUESTION	ESSENTIAL KNOWLEDGE	NOTES
Question 1: PEG XR	Demonstrate the bony features of the upper cervical vertebrae on this x-ray?  What ligaments stabilise these bones?	Lateral mass of Atlas (C1), Body of Axis (C2), Dens of Axis (C2), Lateral atlanto-axial joint, Spinous process of Axis (C2)  Cruciate ligament Alar ligament Anterior longitudinal ligament = anterior atlanto-axial membrane = anterior atlano-occipital membrane Posterior longitudinal ligament = tectorial membrane Ligamentum flavum = posterior atlanto-axial membrane = posterior atlano-occipital membrane Nuchal ligament Interspinous ligament	Pass Criteria Need lateral mass, dens, body, axis  Need cruciate ligament, alar ligament + 1 other

ACEM 2005.2 PRIMARY VIVA EXAMINATION

SUBJECT: ANATOMY

TOPIC: Photo: Neck, thoracic inlet \_\_\_\_\_ NUMBER: 2.4 \_\_\_\_\_

OPENING QUESTION	What is this structure ?	COMMENTS
	Common carotid artery	*essential
PROMPTS		
SECOND QUESTION (if needed)	How does the internal jugular vein relate to the carotid artery?	
POINTS REQUIRED	1 Emerges from jugular bulb, initially behind internal carotid artery and lying on transverse process of atlas,	*essential
	2 then passes down to be lateral to ICA* within carotid sheath*, with the vagus nerve between it and the artery.	
	3 The terminal part lies superficial and lateral (deep to the junction of the heads of sternocleidomastoid and joins the subclavian to form the brachiocephalic vein behind the medial end of the clavicle).	*
PROMPTS		
THIRD QUESTION (if needed)	Please describe the surface marking of the internal jugular vein ?	
POINTS REQUIRED	1 The surface marking is from the earlobe (or mastoid)* to the sternoclavicular joint (or medial part of clavicle)*.	* essential

TOPIC: Vessels in neck \_\_\_\_\_ NUMBER: 3.5 \_\_\_\_\_

OPENING QUESTION	Identify this structure [23], its branches and their relationship to other structures	COMMENTS
POINTS REQUIRED	1 Subclavian [1]	
	2 Common Carotid [12]	
	3 Internal Thoracic Artery [7] (internal mammary)	
	4 Suprascapular Artery [3]	
	5 Transverse Cervical [4] (superficial cervical)	
	6 Inferior thyroid artery (not seen) – continuation thyrocervical trunk	
	7 Scalenus anterior [2]	
	8 Vagus Nerve [6]	
	9 Phrenic Nerve [5]	
PROMPTS		
SECOND QUESTION (if needed)	Identify the branches of the external carotid	
POINTS REQUIRED	1 origin upper border C4 / upper border thyroid cartilage	
	2 from front - superior thyroid, lingual, facial	
	3 from behind - occipital, posterior auricular	
	4 medial – ascending pharyngeal	
	5 terminal – superficial temporal and maxillary arteries	
	6	

TOPIC	QUESTION	ESSENTIAL KNOWLEDGE	NOTES
Question 1: (Photo)	Identify the major vascular structures in this picture.  (Prompt if required)	Superior vena cava (26) Left (13) and right (18) brachiocephalic vein (13) Left and right subclavian veins (24) Left internal jugular vein (8) Brachiocephalic trunk (4) Right common carotid artery (19) Right subclavian artery (21) Left common carotid artery (14) Thyrocervical trunk (32) and its branches: inferior thyroid art. (6), ascending cervical art (3); internal thoracic art. (9)	Need 6/11 bold to pass
Question 2: (Not related to photo)	Describe the course of the right subclavian artery.	<ul style="list-style-type: none"> <li>• Arises from brachiocephalic trunk</li> <li>• Runs posterior to right sternoclavicular joint as ascends through thoracic inlet</li> <li>• Arches superolaterally and passes posterior to anterior scalene muscle (relationship to this muscle defines its 3 parts)</li> <li>• Descends posterior to middle of clavicle and crosses over 1<sup>st</sup> rib to become axillary artery</li> </ul>	3/4 Bold required to pass
Question 3: (Not related to photo)	Name the branches of the subclavian artery.	1 <sup>st</sup> part: <ul style="list-style-type: none"> <li>• Vertebral artery</li> <li>• Internal thoracic artery</li> <li>• Thyrocervical trunk</li> </ul> 2 <sup>nd</sup> part: <ul style="list-style-type: none"> <li>• Costocervical trunk</li> </ul> 3 <sup>rd</sup> part: <ul style="list-style-type: none"> <li>• Dorsal scapular artery</li> </ul>	2/3 of part 1 bold to pass

### Triangles

Question 4:	a. Define the boundaries of the anterior triangle of the neck.	SCM, midline, mandible	(need all 3)
Photo: Anterior Triangle neck	b. The internal jugular vein has been removed. Name some structures in the anterior triangle	Muscle – SCM, strap muscles Lymph nodes – jugulo-digastric Artery – common carotid, int and ext carotid, sup thyroid, lingual, facial Vein – Branchiocephalic, subclavian Nerve – recurrent laryngeal	3 to pass
	c. Name the branches of the external carotid	Ant. Asc. pharyngeal, superior thyroid, lingual, facial Post. Occipital, post auricular, superficial temporal, maxillary	2 to pass

ACEM 2007.1 PRIMARY VIVA EXAMINATION

SUBJECT: ANATOMY

TOPIC: Neck \_\_\_\_\_ NUMBER: \_\_\_\_\_

<b>OPENING QUESTION</b>	What are the boundaries of the anterior triangle of the neck? (don't show picture yet)	<b>COMMENTS</b>
<b>POINTS REQUIRED</b>	1 Sternomastoid	
	2 Midline	
	3 Mandible	
	4	
	7	
<b>PROMPTS</b>		
<b>SECOND QUESTION (if needed)</b>	In this picture the sternomastoid has been removed. Identify the major blood vessels	
<b>POINTS REQUIRED</b>	1 Common carotid (7)	mandatory
	2 Int jugular (17)	mandatory
	3 Facial v (12)	
	4 Ant jugular (4)	
	5 Ext carotid (9)	
	6	
<b>PROMPTS</b>		
<b>THIRD QUESTION (if needed)</b>	What other structures can you identify in the picture?	5 to pass
<b>POINTS REQUIRED</b>	1 Submandibular gland (33)	
	2 Parotid / facial nerve (25)	
	3 Masseter (22)	
	4 Omohyoid (34)	
	5 Digastric (3)	
	6 mandible (21), hyoid	
<b>PROMPTS</b>		

SUBJECT: ANATOMY

TOPIC: Anterior Triangle \_\_\_\_\_ NUMBER: 2-5 \_\_\_\_\_

<b>OPENING QUESTION</b>	Identify the major structures in this picture	<b>COMMENTS</b>
<b>POINTS REQUIRED</b>	1	8 to pass
	2	
	3	
	4	
	5	
	6	
	7	
<b>PROMPTS</b>		
<b>SECOND QUESTION (if needed)</b>	Demonstrate the course of the right subclavian artery	
<b>POINTS REQUIRED</b>	1 Arises Brachiocephalic trunk	
	2 Over 1 <sup>st</sup> rib behind scalenus anterior	
	3 Lies in relation to first part of brachial plexus	
	4	
	5	

TOPIC 4	Root of neck photograph	COMMENTS
QUESTIONS AND POINTS REQUIRED	Outline the thyroid gland	
	What vascular structures can be identified at the root of the neck	SVC, L&R brachiocephalic arteries and veins, carotids and subclavians
	What are these nerves (5 and 6 in photo)	Vagus and phrenic

TOPIC	QUESTION	ESSENTIAL KNOWLEDGE	NOTES
Question 1: (Discussion)	Define the boundaries of the anterior triangle of the neck.	<ul style="list-style-type: none"> <li>• Anterior border of sternocleidomastoid</li> <li>• Midline of neck</li> <li>• Inferior border of the mandible</li> </ul>	All 3 to pass
Question 2:	<p>(a) Describe the surface markings of the carotid sheath in the neck.</p> <p>(b) What are the contents of the carotid sheath?</p>	<p>(a) Carotid sheath <b>runs along a line joining the sternoclavicular joint to a point midway between the mastoid process and the angle of the mandible.</b></p> <p>(b) <b>Common carotid artery, internal jugular vein, vagus nerve</b></p>	All to pass
Question 3:	Describe the location of the thyroid gland in the neck.	<ul style="list-style-type: none"> <li>• Located anteriorly in the neck at level of C5-T1</li> <li>• Lies <b>deep to sternothyroid and sternohyoid muscles</b></li> <li>• <b>Right and left lobes sit anterolateral to the larynx and trachea</b></li> <li>• A thin <b>isthmus unites the two lobes across the trachea (usually at 2<sup>nd</sup> and 3<sup>rd</sup> tracheal rings)</b></li> </ul>	2/3 bold to pass

3. Photo – side of neck	1. What structures can you identify in this picture?	( at least 6 ) Can work these off photo provided.	
	2. ( if not already identified , point to common carotid bifurcation and ask what it is ) Can you describe the branches of the internal and external carotid.	<p>Branches of Int Carotid..no branches, starts lateral and eventually passes post and finishes medial and deep to the ext.c, to the side of pharynx.</p> <p>Ext Car. -.6 branches, 3 ant, 2 behind and 1 med. Ant branches are sup thyroid..most inf , lingual above, and facial above that. Post branches are occipital most inferior, &amp; above that the post auric (below &amp; above digastric). Ascend. Phar. is med. branch</p>	

3) Although a lot of structures have been removed, can you discuss and demonstrate the relations of the int & ext carotid?  (may leave for later)	<p>Int carotid has vein lateral with the vagus in between, behind is symp trunk, pharyngeal v, sup laryngeal br of vagus. Medial is asc pharyngeal art. Ant is ling and facial v, occipital art, hypoglossal n, scm muscle and post belly of diaphragm.</p> <p>Ext is separated from int by deep part of parotid and pharyngeal structures ( stylo pharyngeus m, glossopharyngeal n and ph br of vagus</p>
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Question 4 Photo neck	<p>This is a lateral photo of the neck.</p> <p>Demonstrate the borders of the posterior triangle</p> <p>Demonstrate the borders of the anterior triangle</p> <p>What is this structure (12 – external carotid) - What are its branches?</p>	<p>SCM, Trapezius, Clavicle</p> <p>Midline, SCM, Mandible</p> <p>Ascending pharyngeal Superior thyroid Lingual Facial Occipital Posterior auricular Superficial temporal Maxillary</p> <p>o If required, indicate not all are visible</p>	<p>Need all 3 borders of each to pass</p> <p>Need all 3 borders to pass</p> <p>2 branches to pass</p>
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