

## Unit 21: Topographic anatomy: **Neck 2: anterior cervical regions and larynx**

### Guide for the practical class using Anatomedia online

#### Topography of anterior cervical regions

1. Go to An@tomedica, **neck** module-regions-frame: **01** (Surface markings of neck)
  - Turn on the 'lm' button to display borders between the neck and neighboring regions (head, thorax, upper limb and back)
  - Activate 'can you identify' to see individual surface margins
2. Go to An@tomedica, **neck** module-regions-frame: **07** (Regions of neck)
  - Click on underlined text to learn about three groups of two regions (six neck regions), pay particular attention to the 'anterior triangle'
  - Activate 'can you identify' to see superficial and deep neck regions
3. Go to An@tomedica, **neck** module-regions-frame: **10** (Borders of triangles in neck)
  - Turn on the 'lm' button to display triangles of the neck and their borders
  - Activate 'can you identify' to see individual surface (bony and muscular) margins
4. Go to An@tomedica, **neck** module-regions-frame: **11** (Submental & muscular triangles)
  - Turn on the 'lm' button to display submental and muscular triangles
  - Click on underlined text to identify the contents of these two triangles
  - Activate 'can you identify' to see visible bony landmarks, muscles, fasciae, vessels and nerves
5. Go to An@tomedica, **neck** module-regions-frame: **12** (Submandibular triangle)
  - Click on underlined text to identify the contents of submandibular triangle
  - Activate 'can you identify' to see visible muscles, fasciae, glands, vessels and nerves
6. Go to An@tomedica, **neck** module-regions-frame: **13** (Carotid triangle)
  - Click on underlined text to identify the carotid sheath and contents of carotid triangle (arteries, veins & lymph nodes, nerves)
  - Activate 'can you identify' to see visible muscles, fasciae, bones, cartilages, glands, vessels and nerves

7. Go to An@tomedica, **neck** module-regions-frame: **14** (Carotid triangle)  
-Click on underlined text to identify the carotid sheath structures that traverse the gap deep to posterior belly of digastric muscle  
-Activate 'can you identify' to see visible muscles, vessels, nerves and ganglia

### **Supra- and infrahyoid muscles and dissection frames**

8. Go to An@tomedica, **neck** module-systems-frames: **14 & 15** (Suprahyoid and infrahyoid-strap muscles)  
-Click on underlined text to identify attachments, function and supply of these muscles  
-Activate 'can you identify' to see positions and attachments of these muscles
9. Go to An@tomedica, **neck** module-dissection-frames: **02 to 05** (Anterior triangle of neck LAYER-BY-LAYER DISSECTION)  
-Turn on the colored buttons to highlight different dissected structures  
-Activate 'can you identify' to see dissected structures

### **Nerves and blood vessels of anterior cervical regions**

10. Go to An@tomedica, **head** module-systems-frame: **66** (Cranial nerves IX & X)  
-Click on underlined text to review anatomy of the glossopharyngeal and vagus nerves, particularly branches innervating structures in the neck with their SVE, GSA, GVA and SVA fibres  
-Activate 'can you identify' to visualize individual branches of CN IX and X, particularly their neck-projecting fibres. Activation of colored buttons will highlight different structures on the image (cartilage, muscles, ligaments, arteries, viscera, serous membrane)
11. Go to An@tomedica, **head** module-systems-frame: **67** (Cranial nerves XI & XII)  
-Click on underlined text to review anatomy of accessory and hypoglossal nerves, their branches innervating neck muscles with GSE fibres  
-Activate 'can you identify' to visualize individual branches of CN XI and XII and muscles that they innervate
12. Go to A@tomedica, **neck** module-systems-frame: **33** (Carotid & subclavian arteries)  
-Click on underlined text to review branches of the common and external carotid arteries, their divisions and branches  
-Activate 'can you identify' to visualize the above arterial branches

13. Go to An@tomedica, **neck** module-systems-frame: **36** (Jugular & subclavian veins)  
-Click on underlined text to review anterior, external and internal jugular and subclavian veins and their tributaries  
-Activate 'can you identify' to visualize the above veins and their tributaries

## **Larynx**

14. Go to An@tomedica, **neck** module-regions-frame: **08** (Laryngopharynx and laryngeal inlet)

-Click on underlined text to review:

-internal features of laryngopharynx

-laryngeal inlet and its role

-clinical relevance of laryngopharynx in unconscious patients

-pharyngeal reflexes

-Activate 'can you identify' to visualize mucosal features of laryngopharynx and laryngeal inlet. Activation of 'lm' button displays innervation territories of structures displayed

15. Go to An@tomedica, **neck** module-regions-frame: **09** (Laryngeal wall & cavity)

-Click on underlined text to review:

-muscles that are part of laryngeal wall

-internal features of larynx

-clinical relevance of endotracheal intubation

-mechanism of laryngeal (cough) reflex

-Activate 'can you identify' to visualize components of laryngeal wall, mucosal features of laryngeal inlet and laryngeal cavity and nerve supply of larynx. Activation of 'lm' button masks areas outside laryngeal cavity.

16. Go to An@tomedica, **neck** module-systems-frame: **16** (Larynx intrinsic muscles)

-Click on underlined text to review attachments and functions of all laryngeal muscles

-Activate 'can you identify' to visualize the above muscles as well as laryngeal cartilages, hyoid bone, membrane and ligaments

## **Imaging**

17. Go to An@tomedica, **neck** module-imaging-frame: **05** (Larynx & tracheal - bronchogram)

-Activate 'can you identify' to visualize parts of larynx demonstrated by using a contrast medium

18. Go to An@tomedica, **neck** module-imaging-frame: **07** (Carotid & vertebral arteriograms)

-Activate 'can you identify' to visualize branches of left common and external carotid artery

19. Go to An@tomedica, **neck** module-imaging-frame: **40** (Larynx & upper oesophagus)

-Activate 'can you identify' to visualize parts of pharyngeal and laryngeal walls

-Click on underlined text to access the video recording of pharynx and larynx