

Carotid triangle

Objectives

By the end of this lab students are expected to be able to

1. Describe the boundaries, and content of the triangle
2. Discuss the carotid sheath regarding its formation, extension, and content
3. Identify major structures within the carotid sheath
4. Compare the courses of internal & external carotid arteries
5. List the branches of external carotid artery
6. Describe the site, vertebral level, function of carotid sinus
7. Discuss the formation, tributaries and surface markings of internal jugular vein

Lab check list

➤ Boundaries

- Superiorly: Posterior belly of digastric supplemented by stylohyoid.
- Antero-inferiorly: Superior belly of omohyoid.
- Posteriorly: Anterior border of sternocleidomastoid.

➤ Contents

1. Carotid sheath
 - I. Carotid arteries
 - (a) Common carotid artery (Carotid sinus and body)
 - (b) Internal carotid artery
 - (c) External carotid artery (ECA).
 - II. Internal jugular vein.
 - III. Cranial nerves
 - (a) Vagus (X)
 - (b) Hypoglossal (XII)
2. Ansa cervicalis.
3. Deep cervical lymph nodes (along the internal jugular vein)

Note: Common carotid artery, divides into external and internal carotid arteries at the level of the upper border of the thyroid cartilage (C4).

Note: The common carotid artery can be compressed against the prominent anterior tubercle of transverse process of the 6th cervical vertebra called carotid tubercle.

Home work:

Q1: When the dentist asked a 50 years old man to put his head back on the dental chair, the man developed syncope. He was wearing a tie with tight knot. The dentist suspected a diseased Carotid sinus.

- 1- Where the carotid sinus is located?
- 2- At which vertebral level it lie?
- 3- It seems that applying pressure on this sinus causes syncope, how?

Q2: In the figure below, identify the following branches of external carotid artery

- a. Superior thyroid artery (.....)
- b. Lingual artery (.....)
- c. Facial artery (.....)
- d. Occipital artery (.....)
- e. Superficial temporal artery (.....)
- f. Maxillary artery (.....)

