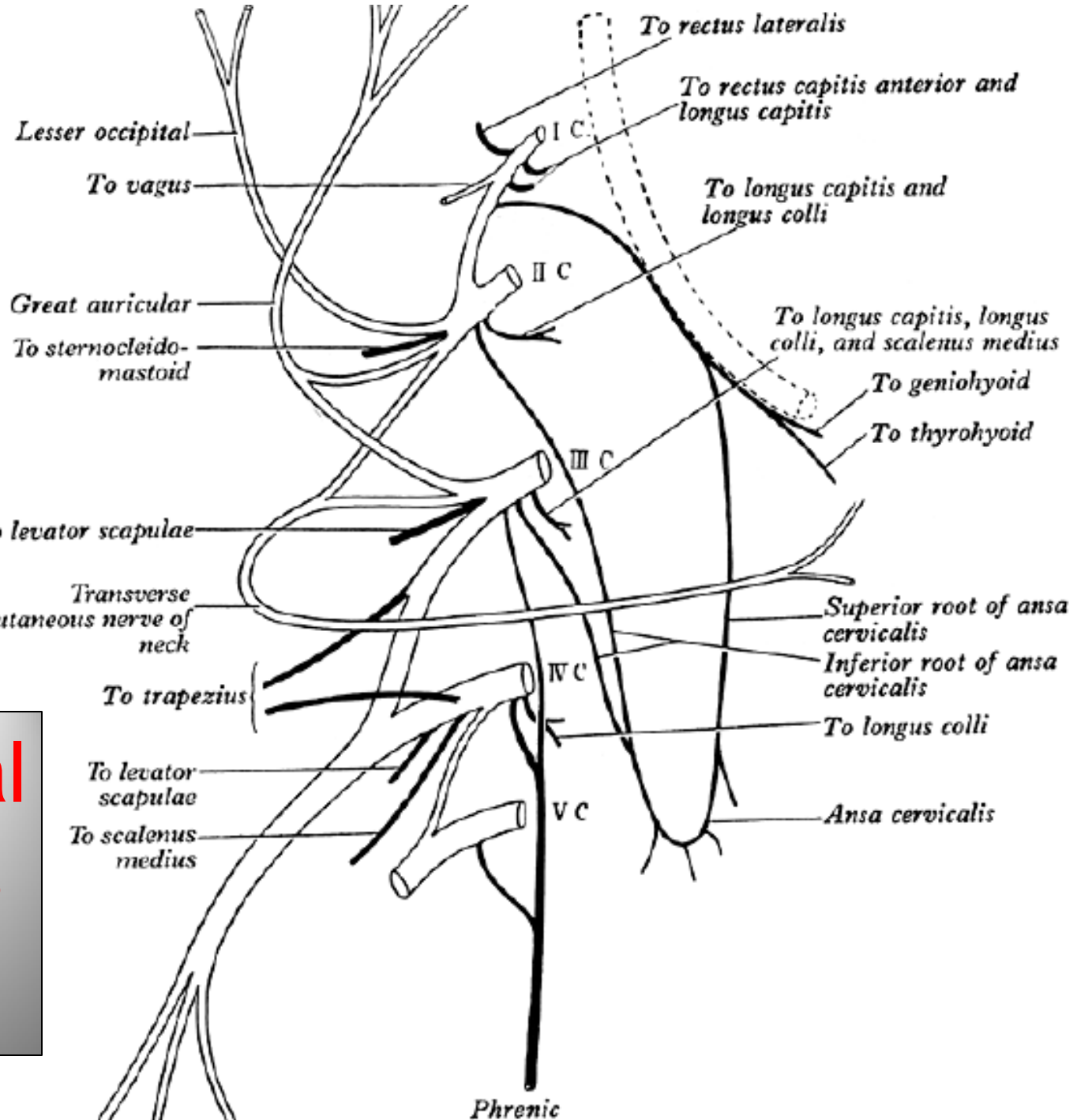


- **Hypoglossal Nerve**

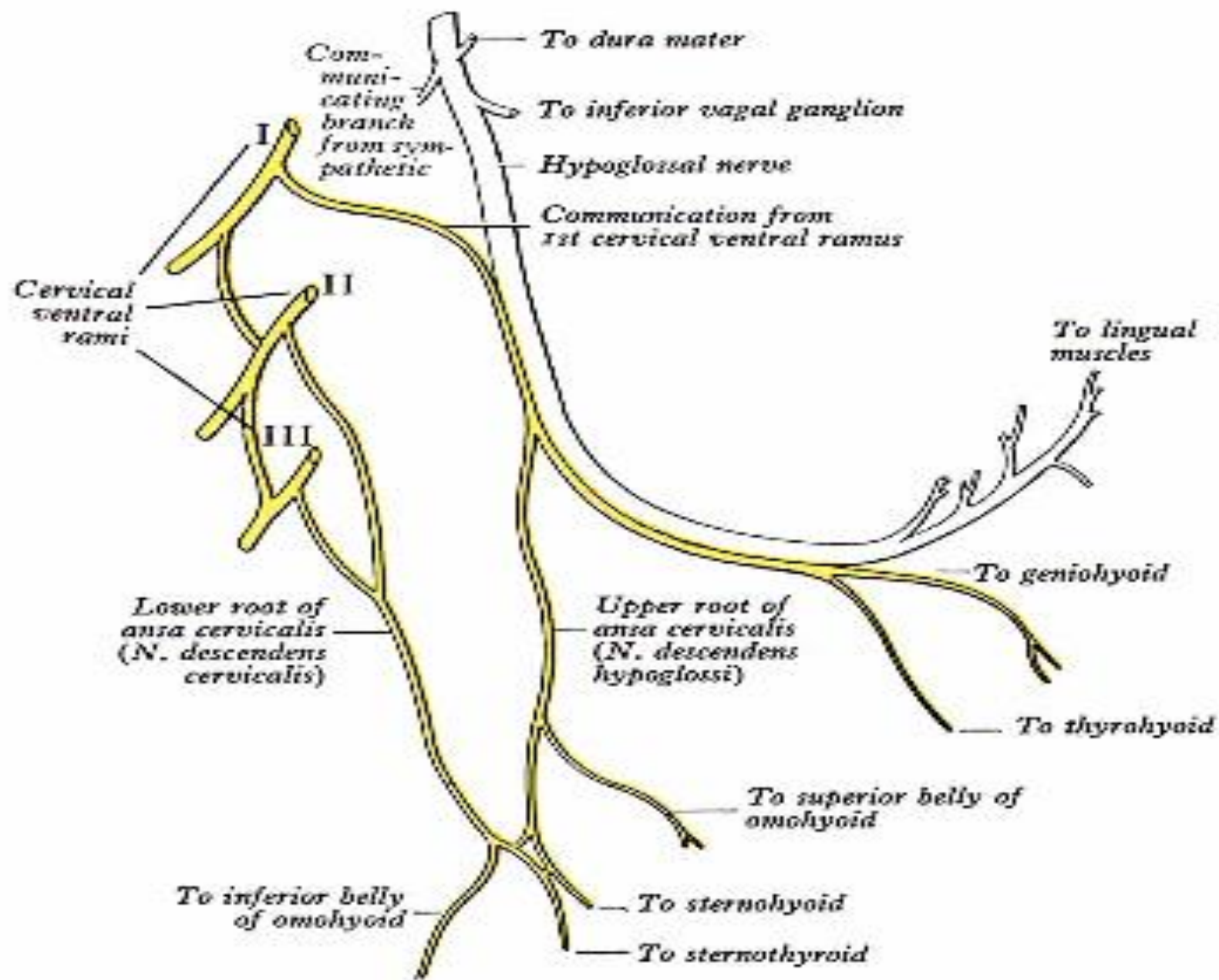
- motor to all the muscles of the tongue, except the palatoglossus

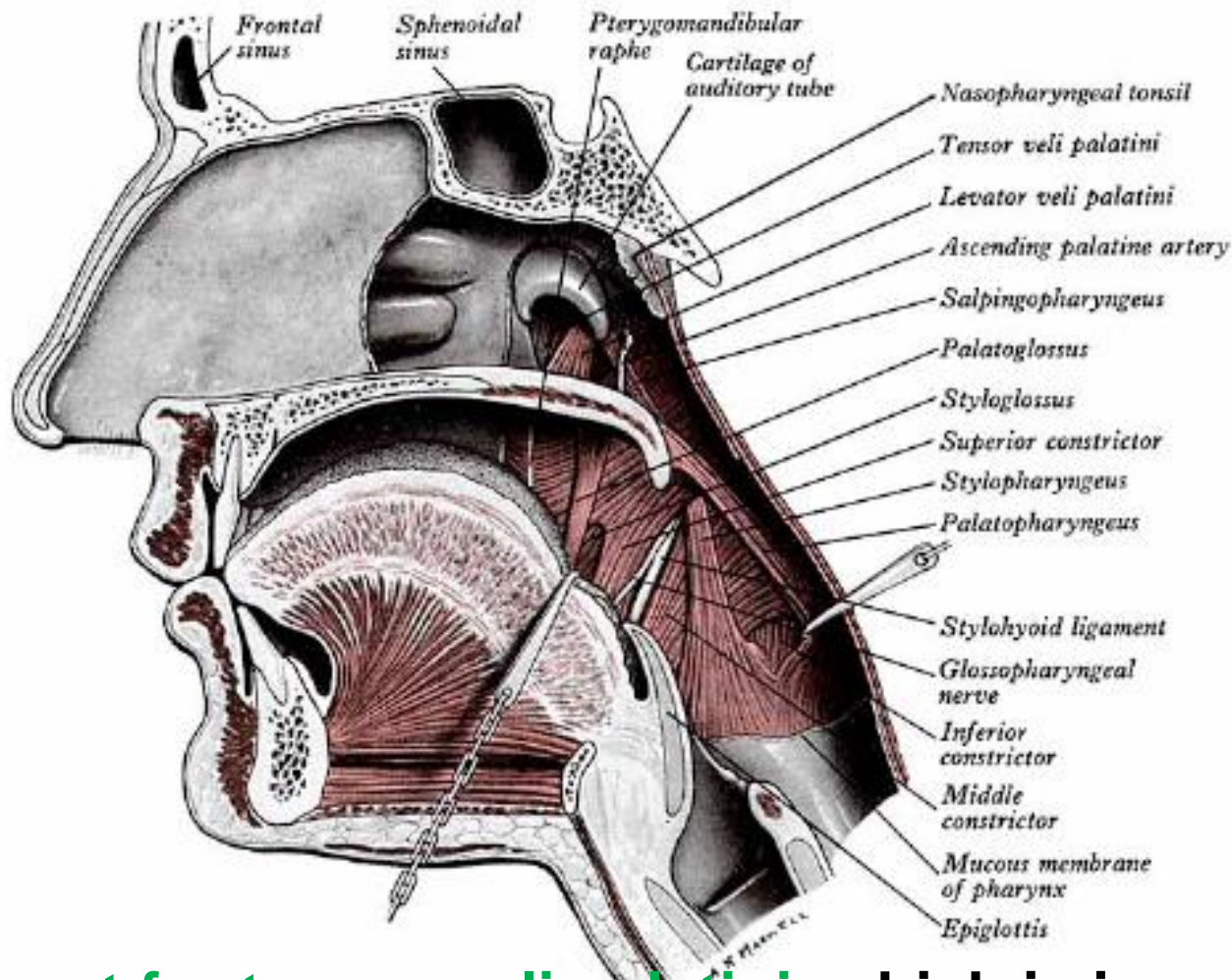
- nucleus : n. **ambiguous** and also from the **lateral hypoglossal nucleus**





# Cervical plexus

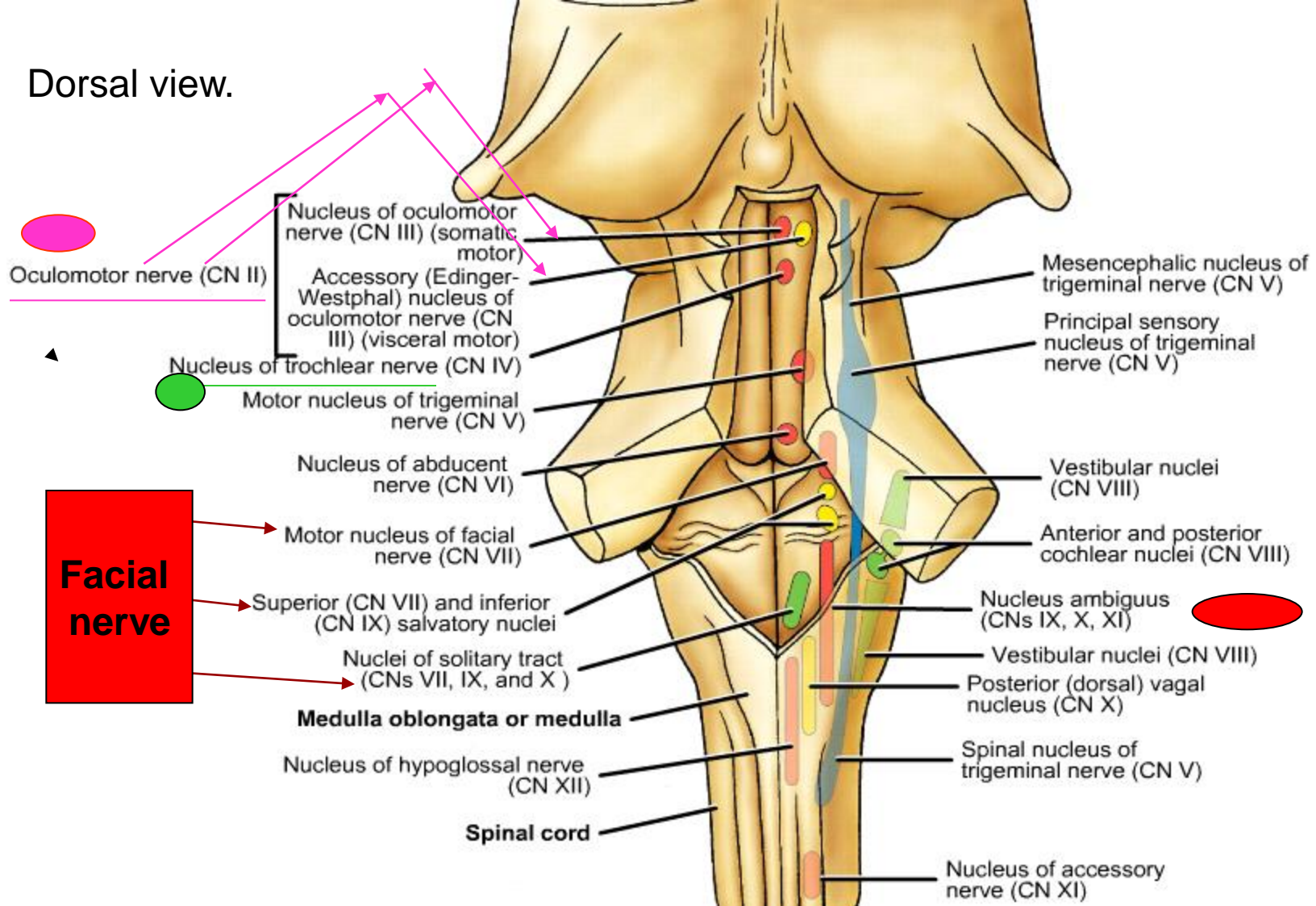




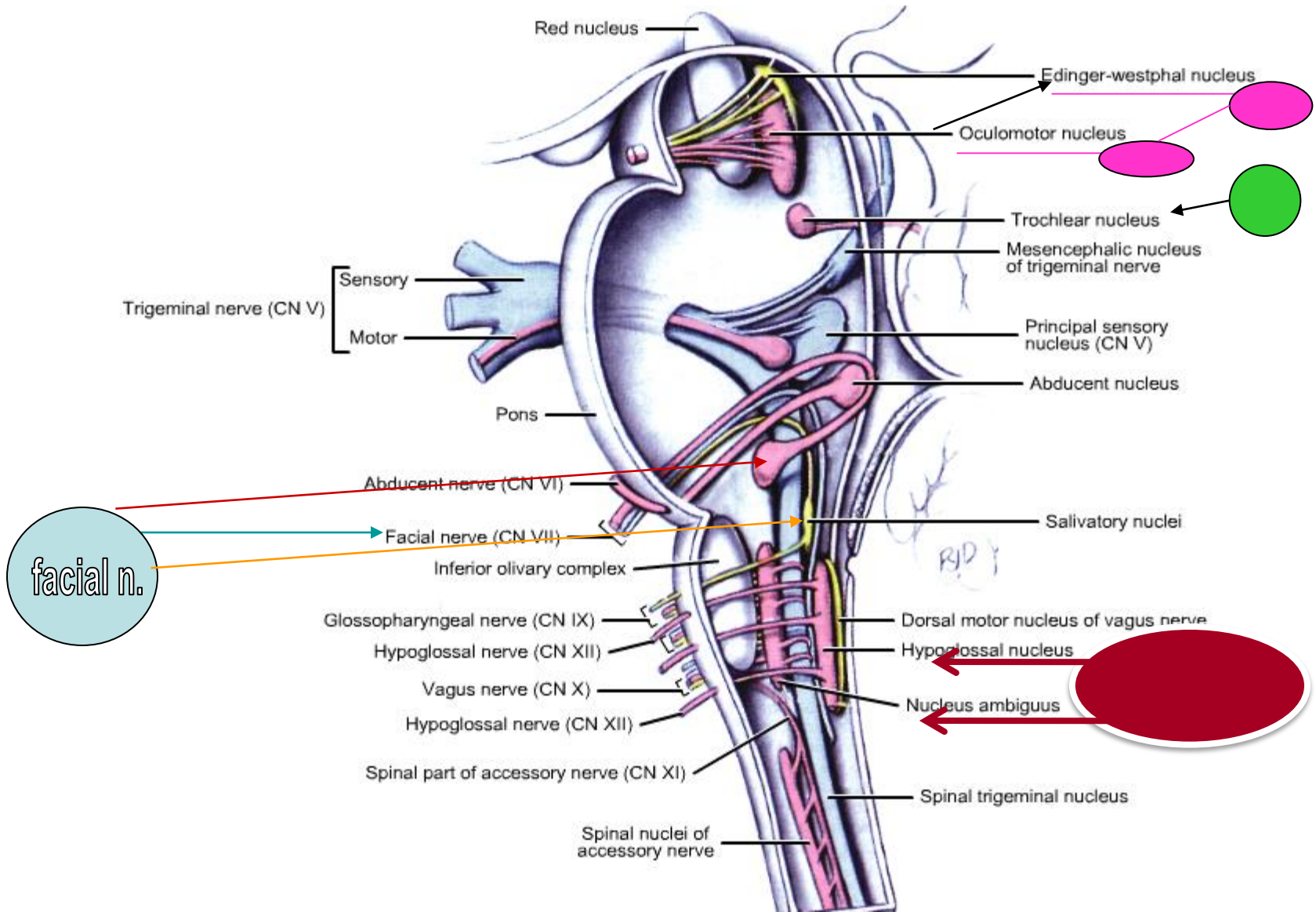
Except for tensor veli palatini, which is innervated by the mandibular nerve (grays p. 1237), all the palatine muscles are supplied by nerve fibres which leave the medulla in the cranial part of the accessory nerve and reach the pharyngeal plexus via the vagus nerve and glossopharyngeal.



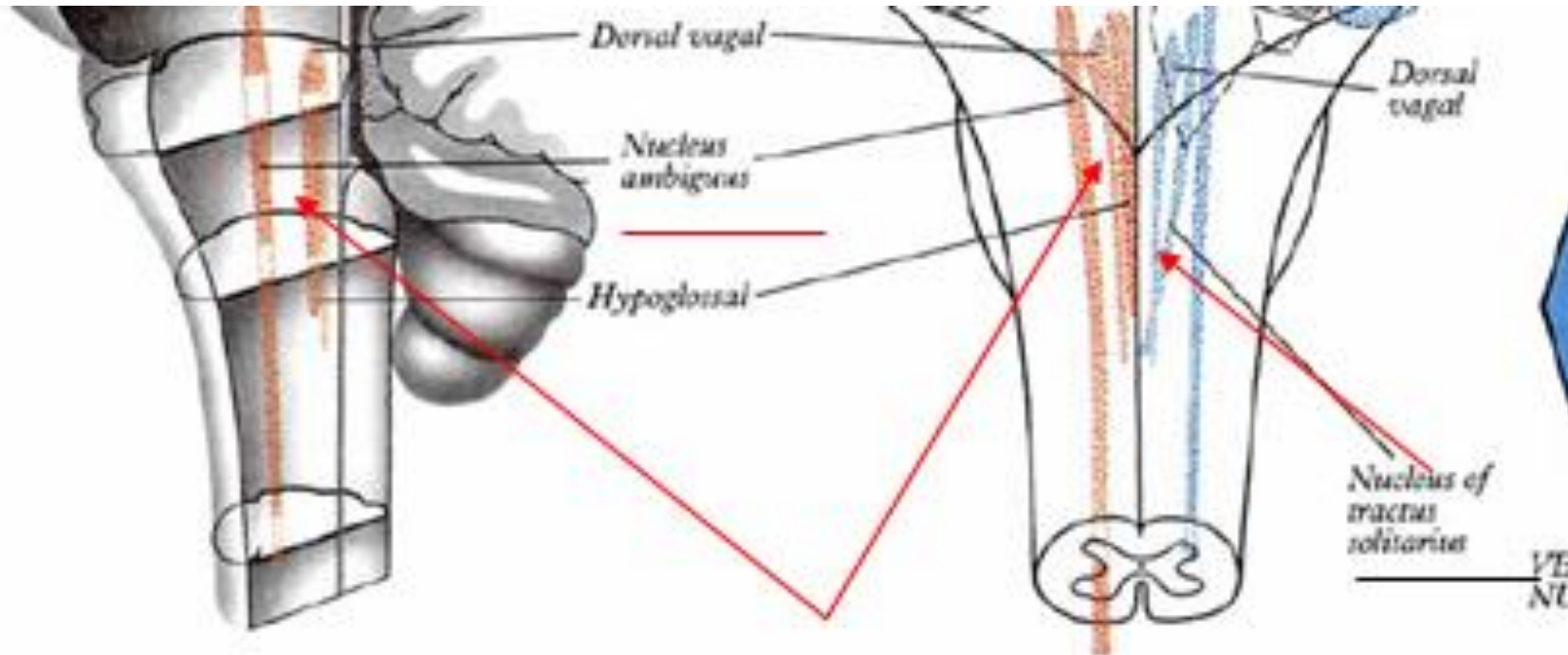
Dorsal view.



---Red, motor nuclei; blue, sensory nuclei; yellow, parasympathetic nuclei; green, special sensory nuclei.



- ***N. ambiguous*** and ***lateral hypoglossal nucleus***

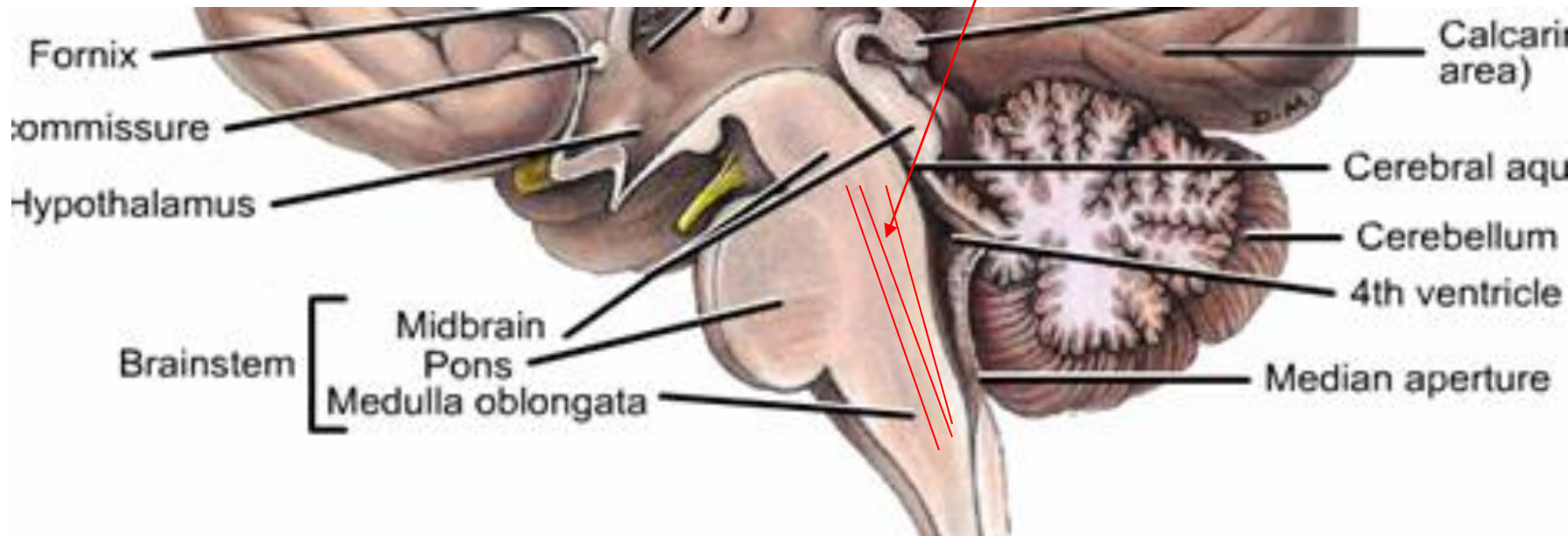


***laryngeal muscles :more caudal zones ,  
pharynx :intermediate group and those to the  
esophagus and soft palate being : rostral***



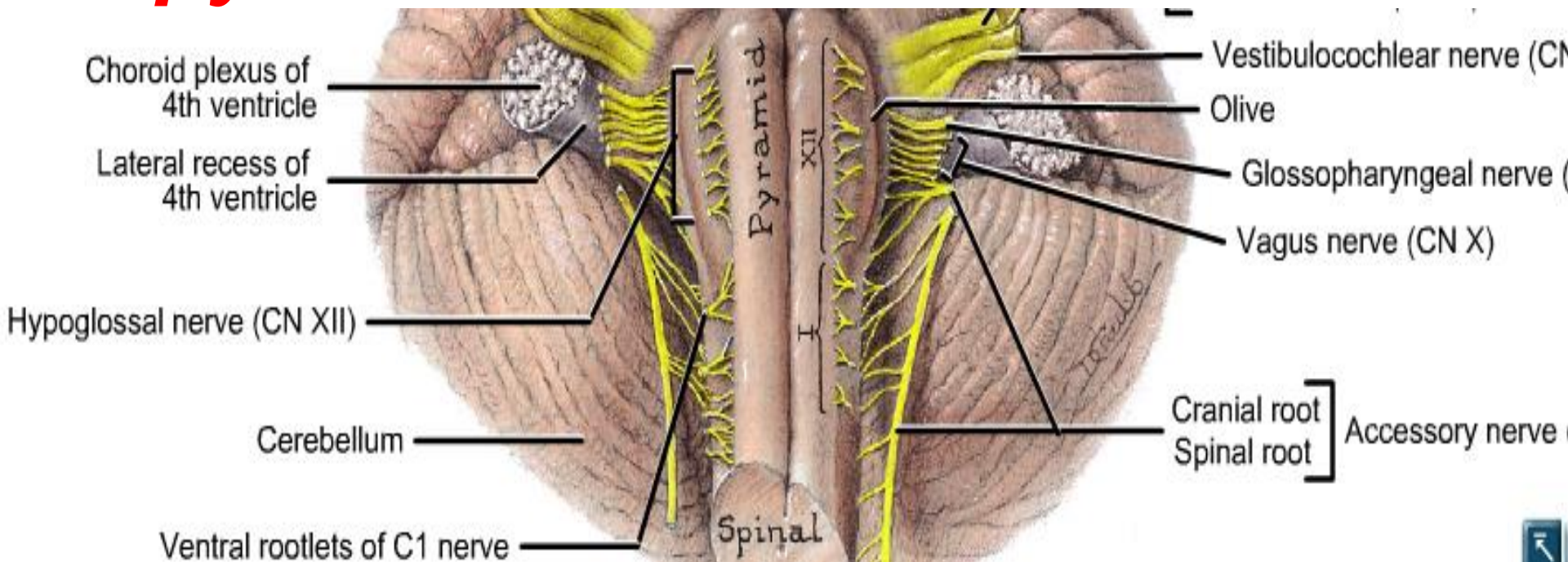
## The Hypoglossal Nucleus

- It is about **2 cm** long, its rostral part corresponding with the hypoglossal triangle in the floor of the **fourth ventricle**
- its caudal part extending into the closed part of the medulla oblongata, where it is ventral and paramedial in the central grey matter



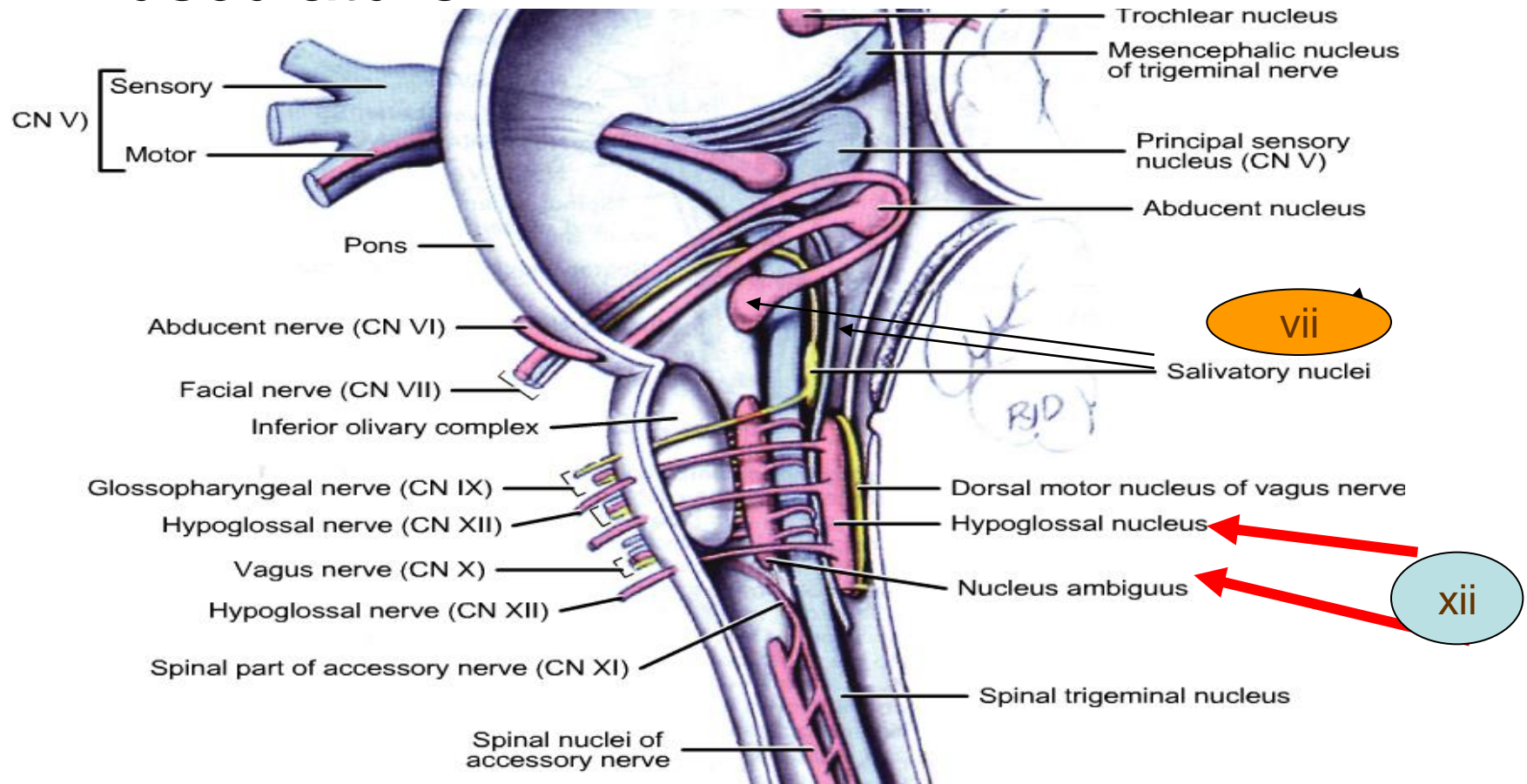


- Its fibres pass ventrally through the medulla to emerge as a linear series of 10–15 rootlets in the anteriolateral sulcus ***between the pyramid and olive***

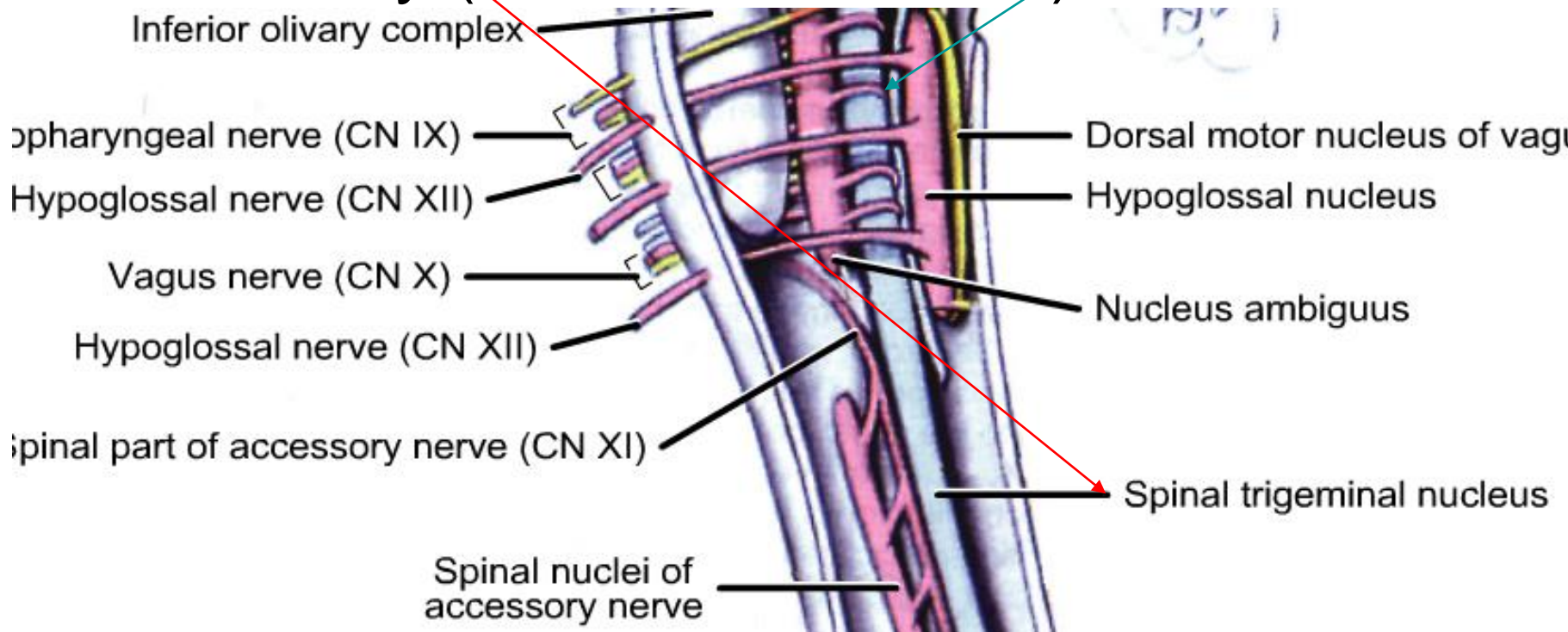


# The hypoglossal nucleus

- *ventromedial and dorsolateral*
- There is a musculotopic to tongue musculature.

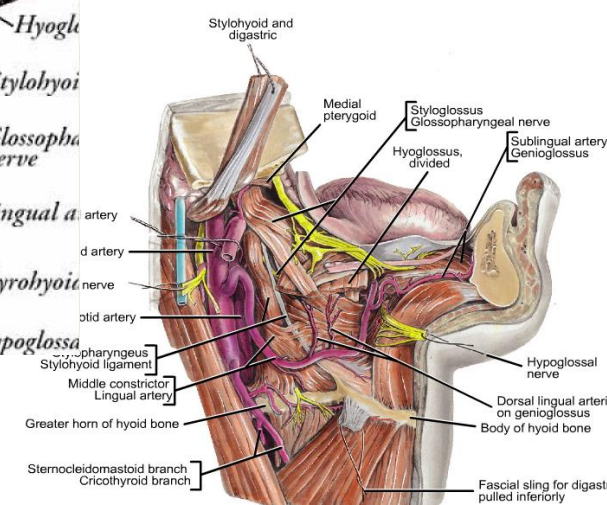
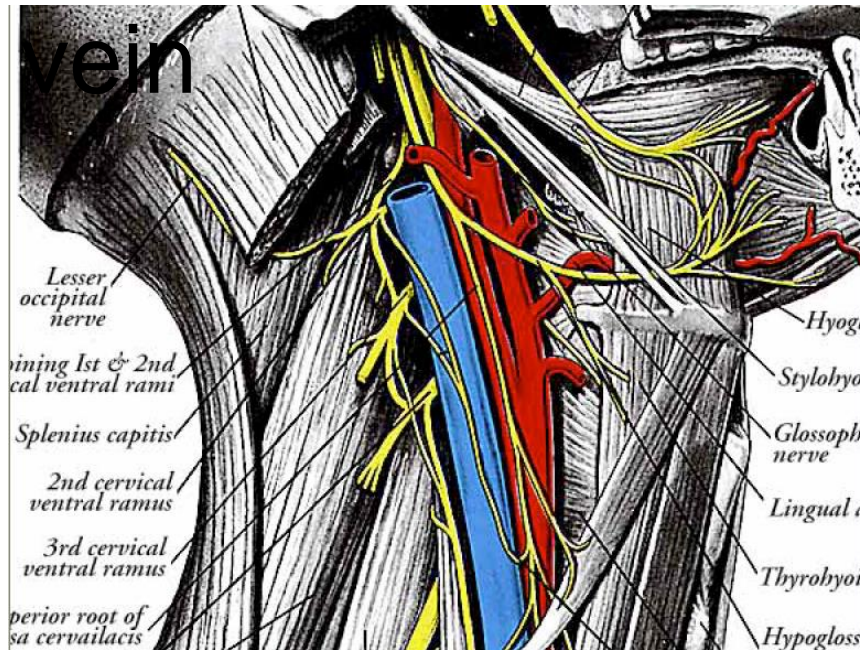


- The nucleus may connect with the cerebellum via adjacent perihypoglossal nuclei and perhaps also with the **medullary** trigeminal **sensory nuclei** and the solitary (facial. Chorda t.n.) nucleus

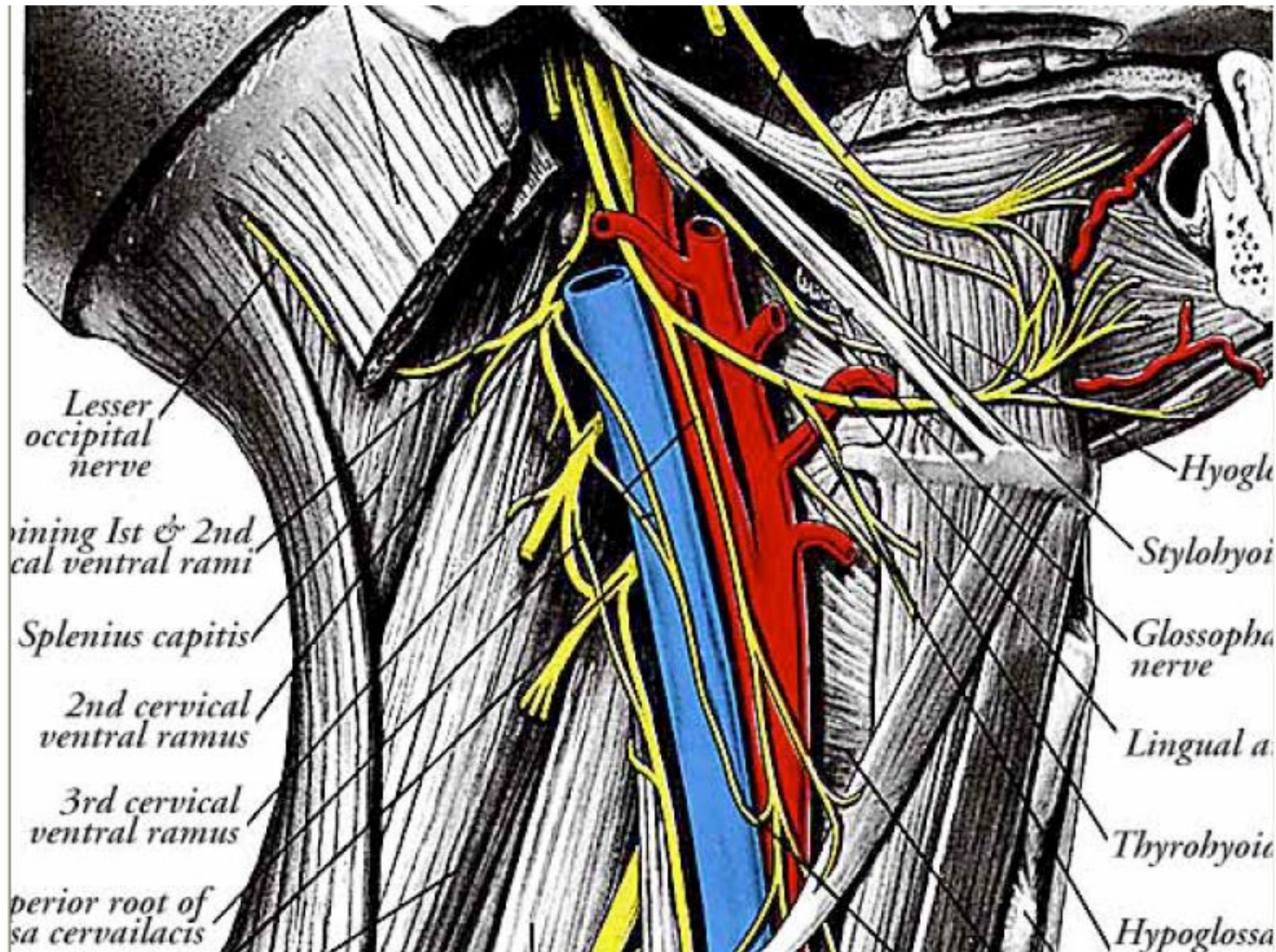




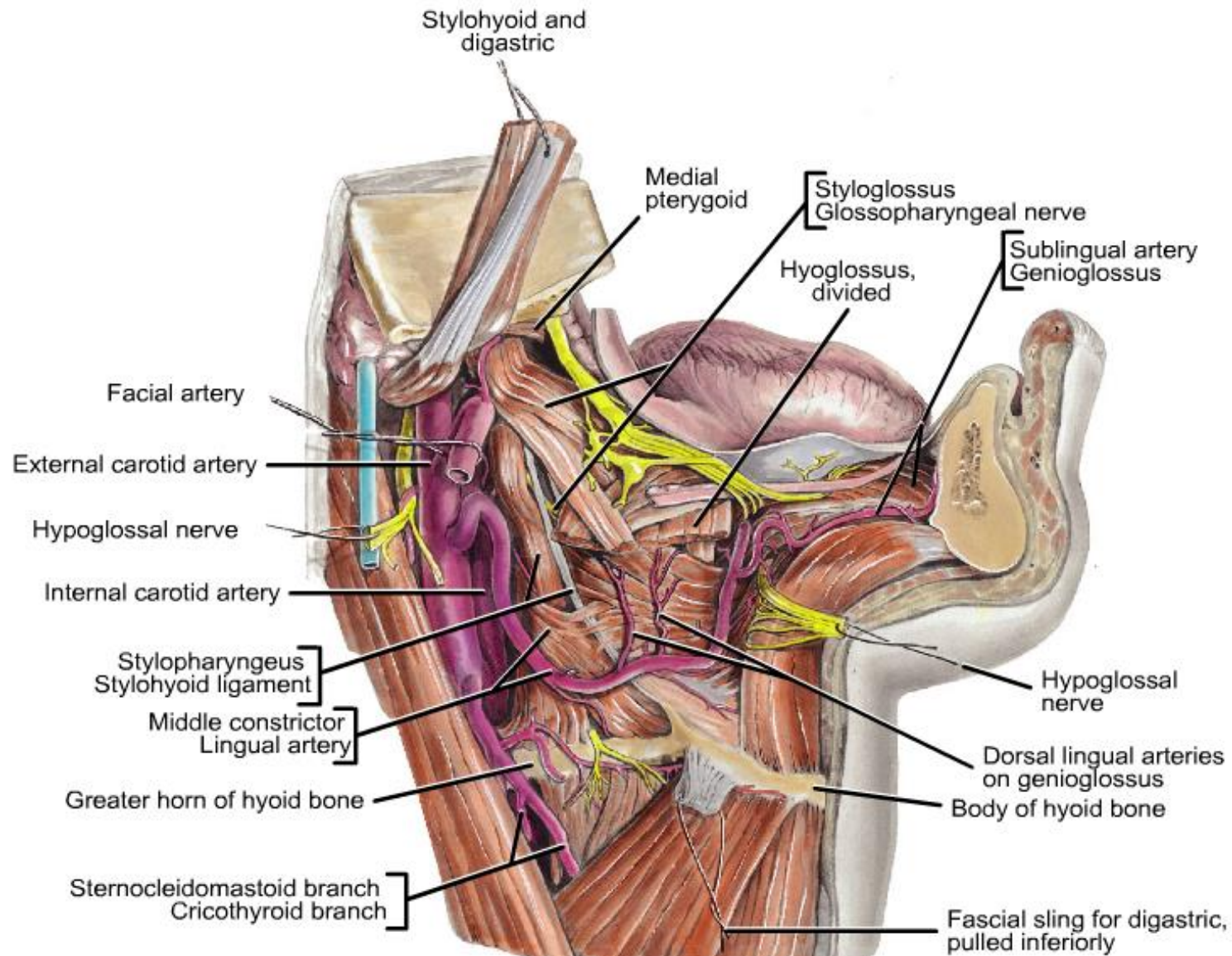
Internal carotid artery, ninth, tenth and eleventh cranial nerves and passes inferolaterally behind the internal carotid artery and glossopharyngeal and vagus nerves to the interval between the artery and the internal jugular vein











- below the posterior belly of the ***digastric*** and emerging between the internal jugular vein and internal carotid artery
- It loops round the inferior sternocleidomastoid branch of the ***occipital artery***, crosses lateral to both internal and external carotid arteries and the loop of the ***lingual artery*** a little above the tip of the greater cornu of the hyoid

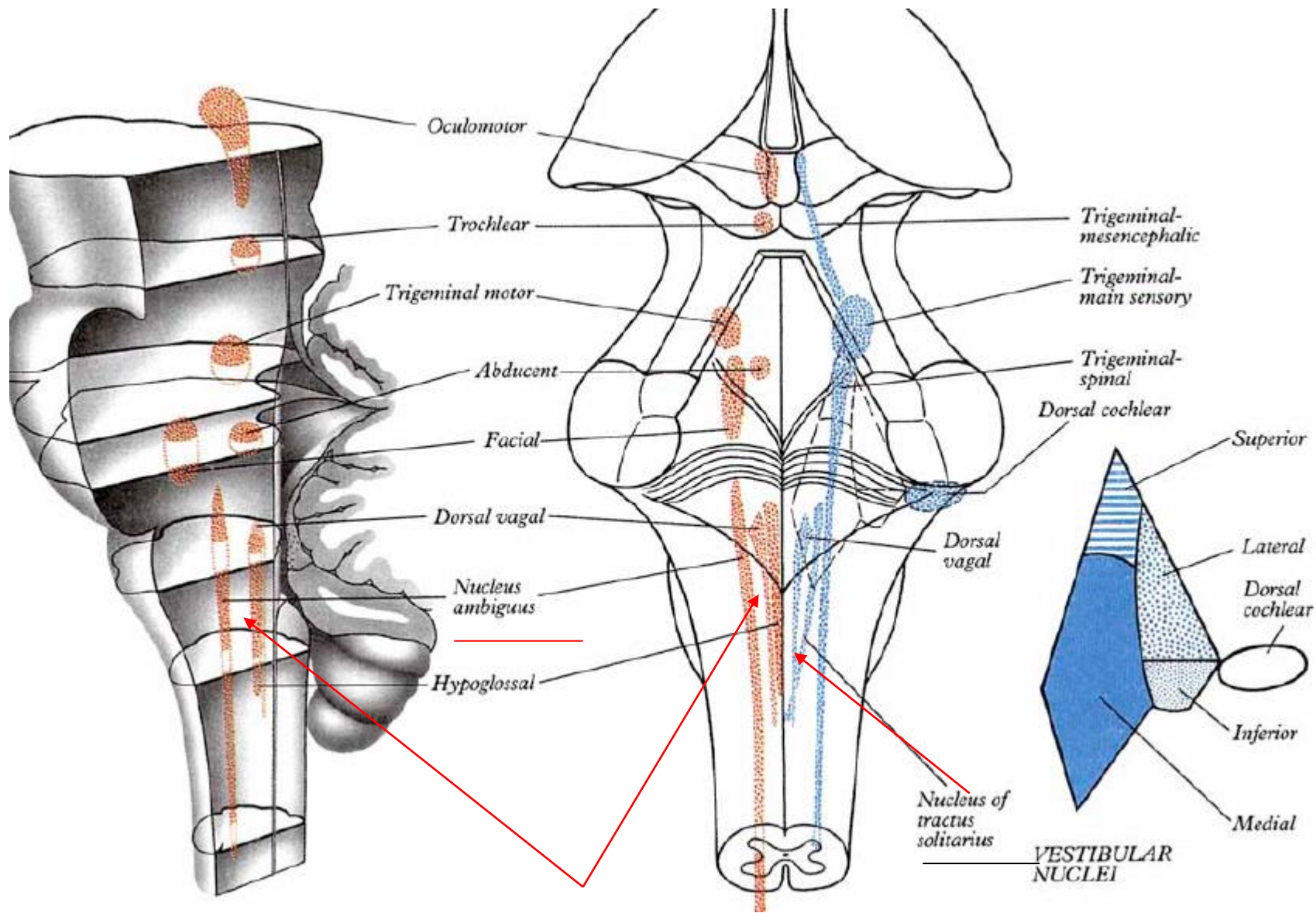


- It inclines up and forwards on the hyoglossus by passing deep to the digastric tendon, stylohyoid and the
- posterior border of the mylohyoid.
- Between the hyoglossus and mylohyoid the nerve is inferior to the deep part of the submandibular gland, submandibular duct and lingual nerve.



- It then passes on to the lateral aspect of the genioglossus, continuing forwards in its substance as far as the tip of the tongue and distributing fibres in the muscle.
- **The hypoglossal nerve communicates with the sympathetic trunk, vagus, first and second cervical nerves and lingual nerve**

- The branches of distribution of the hypoglossal nerve are:
- *meningeal,*
- *descending,*
- *thyrohyoid*
- *supra hyoid m.*



# Communication

- **sympathetic trunk**, vagus and facial nerves.
- **vagus**, one to its auricular branch and the other to superior ganglion of the vagus.
- to the **facial** n. arises from the inferior ganglion, perforating the posterior belly of the digastric to join the facial nerve near the Stylomastoid foramen.



***PREPERED BY :***  
***Prof. Dr. Talib Jawad***  
***DEAN OF COLLEGE OF MEDICINE***  
***DYIALA UNIVERSITY***

