

ACCESSORY NERVE (CN XI)

Subdivision	Arises	Location	Innervation type	Supply
Cranial root	Hindbrain → close to vagus → collects spinal root → enter jugular foramen	Separates from spinal root outside jugular foramen → join vagus below jugular foramen		Voluntary muscles of pharynx, larynx & soft palate
Spinal accessory	Cervical spinal cord → enter via foramen magnum (transverses foramen as a single entity)	Pass under SCM* → cross posterior triangle floor & under trapezius*	Motor Possible sensory	Motor fibres to SCM Motor fibres to trapezius

* Lower trapezius – supplied by cervical plexus motor fibres and sensory fibres

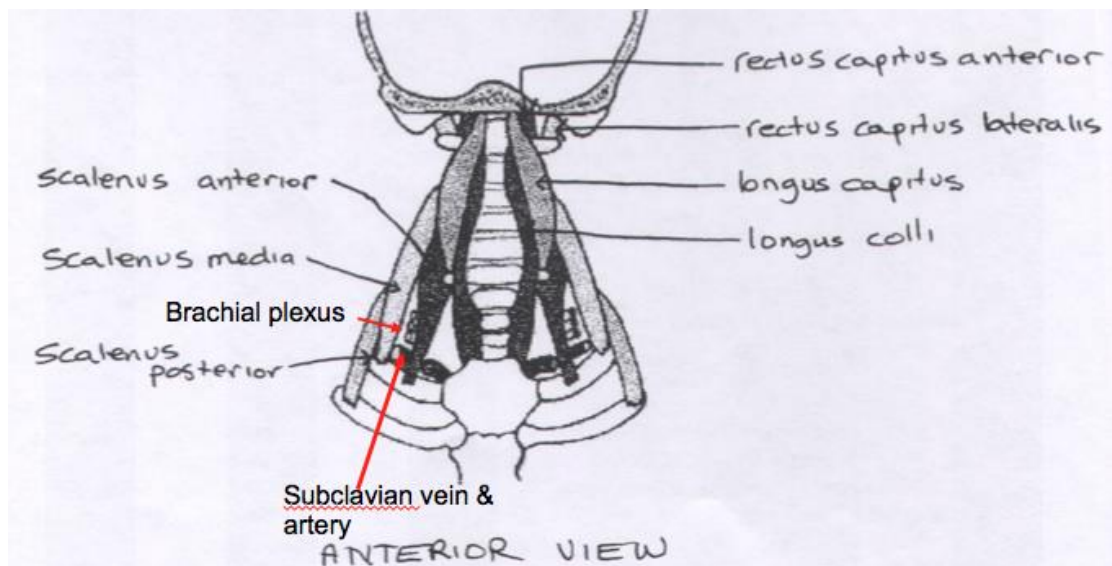
* SCM – supplied by cervical plexus sensory fibres

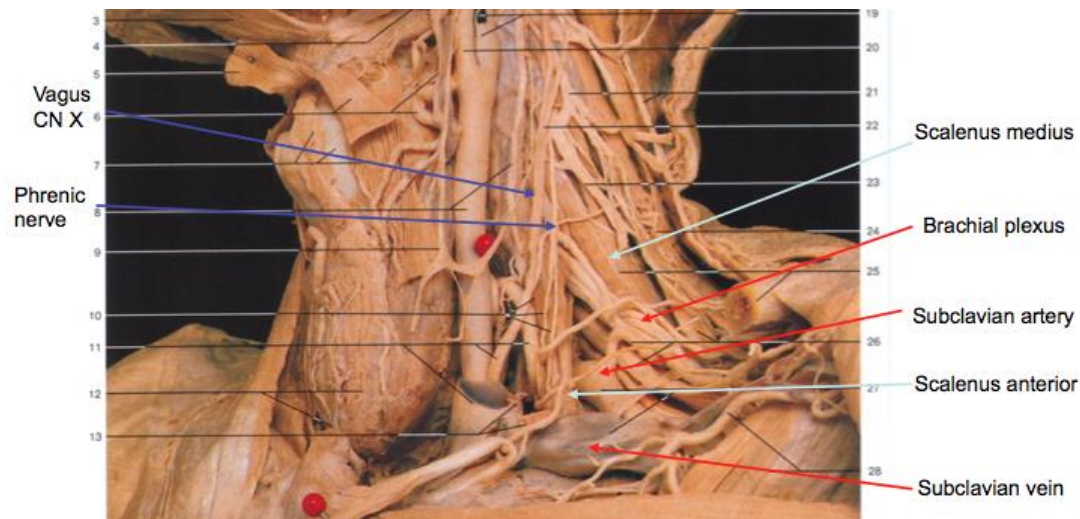
LATERAL VERTEBRAL MUSCLES – 3 x scalene muscles (can include levator scapulae as well)

Muscle	Attachment	Function	Innervation
Scalenus anterior (separated from s.medius by b.plexus)	Upper cervical transverse process → rib 1 b/w groove of subclavian artery & vein Antolateral: Phrenic nerve	Elevate ribs Lateral flexor of neck	Cervical ventral rami
Scalenus medius	Transverse process of all cervical vertebra → rib 1 behind groove for subclavian artery		
Scalenus posterior	Posterior part of scalenus medius → rib 2		

PREVERTEBRAL MUSCLES

Muscle	Attachment	Function	Innervation
Longus colli (medial)	Atlas to T3 – series of muscular slips	Flex neck & head on neck	Cervical ventral rami
Longus capitus (lateral)	Skull base to TV 3-6 (overlies upper scalene muscles)		
Rectus capitus anterior (medial)	Atlas to base of skull (behind longus capitus)		
Rectus capitus lateralis (lateral)	TV atlas → base of skull		





PREVERTEBRAL & LATERAL VERTEBRAL MUSCLES

Medial to lateral: longus colli → longus capitus → rectus capitus anterior → rectus capitus lateralis → scalenus anterior → scalenus media → scalenus posterior

GROUP OF MUSCLES ASSOCIATED WITH HYOID

Group	Muscles	Attachment	Feature	Innervation	Function
Suprahyoid muscles (above hyoid)	Geniohyoid (Deep to mylohyoid, below tongue)	Mental spine to hyoid	Inferior to & separated from genioglossus (fan shaped, inserts into tongue) by fascial plane superiorly	ventral cervical rami of spinal nerve	Lift hyoid
	Mylohyoid	Mandible mlohyoid line → hyoid body	Inferior to geniohyoid	Mylohyoid nerve (branch of CNV(2))	Lift hyoid
	Digastric anterior belly	Mandible digastric fossa → intermediate tendon		Mylohyoid nerve	Lift hyoid and depress mandible
	Digastric posterior belly	Intermediate tendon → digastric/mastoid notch		Facial nerve	
	Stylohyoid	Styloid process to hyoid	Usually perforated by above hyoid by digastric inter. tendon.	Facial nerve	Lift hyoid