

ARTERIES

Arteries of the Upper Limb

Artery	Main Branches	Branches	Supply
<u>Subclavian Artery</u>	<i>Divided into three parts by Scalenus Anterior Muscle</i>		
		<i>Right:</i> Arises from Brachiocephalic Artery <i>Left:</i> Arises from Arch of Aorta	
(1st Part) Origin to medial border of Scalenus anterior	Vertebral Artery		Supply brain
	Thyrocervical trunk	Inferior Thyroid Artery	Supply lower part of thyroid, parathyroid, the larynx, Trachea, Esophagus
		Superficial cervical Artery	
	Internal Thoracic Artery	Suprascapular Artery	Supraspinatus, Infraspinatus
		Musculophrenic Artery	Lower Intercostal Spaces, Diaphragm
		Superior Epigastric Artery	Rectus Abdominis
		Pericardiophrenic Artery	Pericardium
(2nd Part) Lies behind Scalenus Anterior Muscle	Costocervical trunk	Anterior intercostals arteries	Upper six interspaces
		Superior Intercostal Artery	1 st and 2 nd Intercostal spaces
		Deep Cervical Artery	Muscles of the back of the neck
(3rd Part) Lateral border of Scalenus Anterior to outer border of 1 st rib. No branches			
<u>Axillary Artery</u>	Continuation of the subclavian artery. From lateral border of first rib to lower border of teres major muscle. Divided into three parts by the Pectoralis Major muscle		
(1st Part) From lateral border of first rib to upper border of pectoralis minor	The Superior (Highest) thoracic Artery		Pectoral muscles
(2nd Part) Behind the pectoralis minor	Thoracoacromial artery		Muscles of thorax and scapular region
	Lateral Thoracic Artery		Serratus anterior, Pectoral muscles
(3rd Part) From lower border of pectoralis minor to lower border of teres minor	Subscapular Artery	Circumflex Scapular Artery	Scapular, Latissimus dorsi,
		Thoracodorsal artery	
	Anterior Circumflex humeral artery		Deltoid
	Posterior Circumflex humeral artery		Deltoid

Brachial Artery	Continuation of axillary artery below teres major		
	Superior ulnar collateral artery		
	Inferior ulnar collateral artery		
	Profunda artery		Triceps brachii
	Nutrient artery		Humerus
	Muscular Branches		Anterior compartment of arm
Larger of terminal branches of Brachial artery. Begins in the cubital fossa			

Ulnar Artery	Common interosseous artery	Anterior interosseous Artery	Radius and ulna
		Posterior Interosseous Artery	Radius and ulna
	Muscular Branches		Neighboring muscles
	Recurrent branches		
	Branches take part in arterial anastomosis around wrist		
Radial Artery	Smaller of terminal branches of Brachial Artery. Begins in cubital fossa		
	Muscular Branch		Neighboring Muscles
	Recurrent Branch		
	Superficial Palmar Branch		Superficial palmar arch
Superficial Palmar Arch	Formed mainly by ulnar artery. Completed by Deep branch of Ulnar artery and Superficial palmar branch of Radial Artery		
	Common Palmar digital arteries	Proper palmar digital arteries	
Deep Palmar Arch	Formed mainly by Radial Artery. Completed on medial side by deep branch of ulnar artery		
	Arteria Radialis Indicis		Lateral side of index finger
	Arteria Princeps Pollicis		Lateral and medial side of thumb

Arteries of Thorax

Artery	Main Branches	Branches	Supply
Aorta			
Ascending Aorta	Right Coronary artery	Anterior Ventricular Branch	Anterior surface of right ventricle
		The Marginal Branch	Supply apex
		Posterior Ventricular Branches	Diaphragmatic surface of right ventricle
		Posterior Interventricular Artery	Posterior part of ventricular septum and AV node
		Atrial Branches	Posterior surface of both right and left atria
		Branch to SA node	Supplies SA node
		Right Conus Artery	Anterior surface of pulmonary conus
	Left Coronary Artery	Anterior Interventricular (Descending) Branch	The right and left ventricle
		Left Diagonal Artery	
		Left Conus Artery	Pulmonary Conus
	Circumflex Branch (Circumflex is the branch of Left Coronary Artery)	Left Marginal Artery	Apex of left ventricle
		Anterior Ventricular Branch	Supply left ventricle
		Posterior Ventricular Branch	
		Atrial Branches	Left Atrium
Arch of Aorta	Brachiocephalic Artery	Right subclavian Artery Right Common Carotid	<i>Explained on Different Pages</i>
	Left Common Carotid		
	Left Subclavian Artery		
	Posterior Intercostal		Lower nine intercostals

Descending Thoracic Aorta	Arteries		spaces
	Subcostal arteries		Enter abdominal wall
	Pericardial Arteries		Supply Pericardium
	Esophageal Arteries		Supply Esophagus
	Bronchial Arteries		Supply Bronchi
Pulmonary Trunk	Right Pulmonary Artery		To right lung
	Left Pulmonary Artery		To left lung

Arteries of Abdomen

All the arteries of Abdomen arise from Abdominal Aorta. So abdominal Aorta is not mentioned in Artery Coloumn.

Artery	Main Branches	Branches	Supply
Celiac Trunk (Anterior Visceral Branches of Abdominal Aorta)	Left Gastric Artery	Esophageal Branches	Lesser curvature
	Splenic Artery	Short Gastric Arteries	Lesser curvature
		Splenic Arteries	
		Left Gastroepiploic Arteries	Greater Curvature of Stomach
	Hepatic Artery	Cystic Artery	Gall bladder
		Right Gastric Artery	Lesser Curvature
		Gastroduodenal Artery	Right Gastroepiploic Artery (Branch)
			Superior Pancreaticoduodenal Artery (Branch)
		Right Hepatic Artery	
		Left Hepatic Artery	
Superior Mesenteric Artery (Anterior Visceral Branches of Abdominal Aorta)	Jejunal and Ileal Arteries		
	Inferior Pancreaticoduodenal Artery		Pancreas and adjoining part of duodenum
	Middle Colic Artery		Transverse Colon
	Right colic Artery		Ascending Colon
	Ileocolic Artery	Anterior Cecal Artery	
		Posterior Cecal Artery-Appendicular Artery	Appendix
		Ileal Artery	Ilium and Jejunum
		Colic Artery	
Inferior Mesenteric Artery	Left Colic Artery	(Anterior Visceral Branches of Abdominal Aorta)	Descending Colon
	Sigmoid Arteries		Sigmoid Colon
	Superior Rectal Arteries		Rectum and Upper half of anal canal
Abdominal Aorta (Lateral Visceral Branches)	Suprarenal Artery		
	Renal Artery		Kidney
	Testicular or Ovarian artery		Testes or ovaries
Abdominal Aorta (Five Lateral Abdominal Wall Branches)	Inferior Phrenic Artery		
	Four Lumbar Arteries		
Abdominal Aorta (Three Terminal Branches)	Common Iliac Arteries	External Iliac Artery	
		Internal Iliac Artery	
	Median Sacral Artery		

External Iliac Artery	Inferior Epigastric Artery		
	Deep Circumflex iliac A.		
	Femoral Artery		
Internal Iliac Artery (Branches of Anterior Division of Internal Iliac Artery)	Umbilical Artery	Superior Vesical Artery	Upper portion of bladder
	Obturator Artery		
	Inferior Vesical Artery	Artery to Vas deferens	Base of bladder, Prostate, Seminal Vesicles
	Middle Rectal Artery		Muscles of lower rectum
	Internal Pudendal Artery		Anal Canal and skin and muscles of perineum
	Inferior Gluteal Artery		
	Uterine Artery		Uterus
	Vaginal Artery		Vagina and Base of Bladder
(Branches of Anterior Division of Internal Iliac Artery)	Illiolumbar artery		
	Lateral Sacral Arteries		
	Superior Gluteal Artery		

Arteries of Lower Limb

Artery	Main Branches	Branches	Supply
Femoral Artery (Continuation of External Iliac Artery below Inguinal Ligament)	Deep femoral Artery (Profunda Femoris)	Lateral Femoral Circumflex Artery	Hip Joint and Neighboring Muscles
		Medial Femoral Circumflex Artery	Hip Joint and Neighboring Muscles
		Perforating Arteries (3)	Adductors, femur, Posterior femoral muscles
	Superficial Iliac Circumflex Artery		
	Superficial Epigastric Artery		Region of Umbilicus
	Superficial External Pudendal Artery		Supply skin of scrotum
	Deep External Pudendal Artery		Skin of Scrotum or Labium Majus
	Descending Genicular Artery		Supply Knee joint
Popliteal Artery	Muscular Branches		Supply popliteal region
	Articular Branches		
Anterior Tibial Artery	Dorsalis Pedis Artery (Terminal Branch)		Anterior crural muscles
	Anastomotic Arteries		Knee and ankle Joint
	Muscular Branches		Neighboring Muscles
Posterior Tibial Artery	Peroneal(Fibular) Artery	Muscular Branches	Supply Adjacent Muscles, the tibia, fibula and ankle
		Perforating Branch	
		Nutrient artery to fibula	
	Medial Planter Artery		Adductor Hallucis, Flexor Digitorum Brevis
	Lateral Planter artery		Lateral Portion of Sole
	Muscular Branches		Neighboring Muscles
	Nutrient Artery to Tibia		

Arteries of Head and Neck

Artery	Main Branches	Branches	Supply
Common Carotid Artery <i>Divides at level of Thyroid Cartilage</i>	External Carotid Artery	<i>The right common carotid artery arises from brachiocephalic artery behind right sternoclavicular joint and Left arises from Arch of Aorta. The Carotid Sinus is a localized dilatation in beginning of Internal Carotid Artery and is pressoreceptor. Innervated by Glossopharyngeal Nerve. The Carotid Body lies posterior to bifurcation and is chemoreceptor, being sensitive to excess CO₂ and reduced O₂.</i>	
	Internal Carotid Artery		
External Carotid Artery	Superior Thyroid Artery	Branch to Sternocleidomastoid muscle	
		Superior Laryngeal Artery	Pierce Thyrohyoid membrane
	Ascending Pharyngeal Artery		Wall of Pharynx
	Lingual Artery		Supplies Tongue
	Facial Artery		Supplies face
	Occipital Artery		Supply back of scalp
	Posterior Auricular Artery		Scalp above & behind the auricle
	Superficial Temporal Artery		Skin over frontal & temporal regions
	Maxillary Artery	Inferior Alveolar Artery	
		Middle meningeal artery	Meninges within skull
		Muscular branches	Muscles of mastication
Internal Carotid Artery	Ophthalmic Artery		Supplies Eye and other orbital structures
	Posterior Communicating Artery		Join Posterior Cerebral A.
	Choroidal Artery		Choroidal Plexus
	Anterior Cerebral Artery	Cortical Branches	All medial surface of cerebral cortex, Supply "Leg Area" of Precentral Gyrus
		Central Branches	Deep masses of Gray matter within Cerebral Hemisphere
	Middle Cerebral Artery	Cortical Branches	Entire lateral surface of hemisphere, Supplies all motor area except "Leg Area"
		Central Branches	Deep masses of Gray matter within Cerebral Hemisphere
Vertebral artery <i>Enters skull through Foramen Magnum. Both Join to form Basilar Artery</i>	Meningeal Arteries		
	Anterior & Posterior Spinal Arteries		
	Posterior Cerebral Artery		
	Medullary Arteries		
Basilar Artery <i>Formed by Union of Two Vertebral Arteries</i>	Posterior Cerebral Arteries	Cortical Branches	Inferolateral surface of temporal lobe, and lateral & medial surface of occipital lobe. Supplies VISUAL Cortex
		Central Branches	Deep masses of Gray matter within Cerebral Hemisphere, The Midbrain
	Pons, Cerebellum Internal Ear		

Circle Of Willis:

Lies in interpeduncular Fossa at base of Brain. It is formed by Anastomosis between the

- Two Internal Carotid Arteries
- Basilar Artery,
- Anterior and Posterior Communicating Arteries

It supplies the branches to whole brain