

The paired subclavian arteries, which are located above the superior mediastinum, are similar in their course and branches but differ in origin. The right subclavian artery arises from the brachiocephalic artery behind the sternoclavicular joint and the left arises directly from the aortic arch.

Each of the subclavian arteries arches over the apical pleura, passes posterior to scalenus anterior, crosses the first rib and descends into the arm as the axillary artery.

The subclavian arteries can be described as being in three parts, each of which relates to the position of scalenus anterior; the first part is situated between the origin and the medial border of scalenus anterior, the second part is located posterior to scalenus anterior and the third part is located between the lateral border of scalenus anterior and the outer border of the first rib.

#### **Relations-right subclavian artery**

Medial to scalenus anterior, the **right subclavian artery** lies behind the right common carotid artery, vagus nerve (X cranial nerve), and internal jugular vein, in front of the supra pleural membrane, pleura and lung. The right recurrent laryngeal nerve and the ansa subclavia wind round it. Behind scalenus anterior, which separates it from the phrenic nerve, the artery lies on cervical pleura. Lateral to the muscle, the artery lies on the first rib with the vein and the clavicle in front, the lower trunk of brachial plexus and scalenus medius behind.

#### **Relations-left subclavian artery**

In the chest, the **left subclavian artery** lies behind the left common carotid artery, the left vagus, and left phrenic nerves. The trachea, recurrent laryngeal nerve, esophagus, trachea, and left recurrent laryngeal nerve lie medial to it. The left pleura and lung lie lateral to it. In the root of the neck its relations differ from those on the right in that the thoracic duct and the phrenic nerve cross anterior to it and the left recurrent laryngeal nerve does not wind around it.

#### **Branches**

From the first part of each subclavian artery arise the vertebral, internal thoracic, thyrocervical, and costocervical (second part of right subclavian artery) arteries and from the third part the dorsal scapular arteries.