

The **common carotid arteries** are large vessels located in the neck; the right and left differ in origin and length. On the right the common carotid artery arises from the brachiocephalic trunk just posterior to the sternoclavicular joint, and on the left it arises directly from the arch of the aorta postero-lateral to the brachiocephalic trunk. The common carotid artery lies anterior to the transverse processes of C6 to C4, longus colli and capitis and the tendinous slips of scalenus anterior with the cervical sympathetic trunk and ascending cervical artery intervening. Below C6 the common carotid lies between scalenus anterior and longus colli, anterior to the vertebral vessels, inferior thyroid and subclavian arteries as well as the cervical sympathetic trunk. The common carotid artery lies lateral to the esophagus, trachea, inferior thyroid artery and recurrent laryngeal nerve. Antero-laterally, the intermediate tendon of omohyoid crosses it and inferior to this muscle the common carotid is covered by the sternothyroid, sternohyoid and sternocleidomastoid muscles and cervical fascia.

Anterior to the common carotid artery is lies the ansa cervicalis; the anterior jugular vein traverses the artery superior to the clavicle. Posterior to each common carotid artery is the sympathetic trunk, ascending cervical artery and the transverse processes of the sixth to fourth cervical vertebrae; medial is the inferior thyroid artery and lateral is the internal jugular vein.

At the upper border of the thyroid cartilage (lower border of third cervical vertebra) they divide into external and internal carotid arteries. At its bifurcation lies the carotid sinus, a dilatation that has important implications in regulating arterial blood pressure.