

Each brachiocephalic vein is large and valveless and formed by the union of the internal jugular and subclavian veins, at the thoracocervical junction behind the sternal end of the clavicle.

The **right, shorter brachiocephalic vein** arises posterior to the sternal end of the right clavicle. It descends sharply to pass antero-lateral to the brachiocephalic trunk and right vagus nerve (X cranial nerve), with the right phrenic nerve and internal thoracic artery posterior to it. Posterior to the inferior border of the first right costal cartilage it unites with its contralateral fellow, to form the superior vena cava. The right brachiocephalic vein receives the right vertebral, internal thoracic, inferior thyroid and first posterior intercostal veins.

The **left, longer brachiocephalic vein** arises posterior to the sternal end of the left clavicle. It descends obliquely to the right behind the manubrium sterni crossing anterior to the left internal thoracic, subclavian, common carotid and brachiocephalic arteries, left phrenic and vagus (X cranial nerve) nerves and the trachea. Posterior to the inferior border of the first right costal cartilage it unites with its contralateral fellow, to form the superior vena cava. The left brachiocephalic vein receives the left vertebral, internal thoracic, inferior thyroid and superior intercostal veins.