The brachial plexus extends from the neck to the axilla and supplies the upper limb. It is formed from the ventral rami of the 5th, 6th, 7th and 8th cervical nerves and the ascending part of the ventral ramus of the first thoracic nerve. Branches from the 4th cervical and the 2nd thoracic ventral ramus may contribute.

These five ventral rami are the roots of the brachial plexus, emerging from between the anterior and middle scalene muscles. They unite to form three trunks: the upper two roots from the upper trunk; the middle root continues as the middle trunk; the lower two roots form the lower trunk. Behind the middle of the clavicle, each trunk divides into anterior and posterior divisions. The three posterior divisions unite to form the posterior cord. The anterior divisions of the upper and middle trunk form the lateral cord. The anterior division of the lower trunk continues as the medial cord. The three cords are named according to their relationship to the middle part of the axillary artery. These pass into the axilla. Each cord divides into two main branches at the level of the third part of the axillary artery. The posterior cord divides into axillary and radial nerves. The lateral cord divides into the musculocutaneous nerve and into the lateral head of the median nerve. The medial cord ends as the ulnar nerve and the medial head of the median nerve.

Ventral rami of 5th and 6th cervical nerve unite at the lateral border of scalenus medius to form the upper trunk. This runs downwards and laterally, dividing just above or behind the clavicle into anterior and posterior divisions.