The fourth cervical ventral spinal rami leave the vertebral column above the transverse processes of C4 and emerge between scalenus anterior and scalenus medius, deep to the internal jugular vein and the sternocleidomastoid muscle.

The fourth cervical ventral spinal rami send a branch to join with the ventral rami of C3 and C5 to form the phrenic nerves. Together with the ventral rami of C1, C2 and C3 the fourth cervical ventral spinal rami also participate in the formation of the cervical plexus.

Each ramus receives at least one grey ramus communicans from the superior cervical sympathetic ganglion.

Supply

The fourth cervical ventral spinal rami supply the longus colli, scalenus anterior, scalenus medius, levator scapulae, sternocleidomastoid and trapezius muscles. Superficial branches supply the skin of the neck via the supraclavicular nerves.