

The tenth thoracic ventral spinal rami exit the vertebral column through the intervertebral foramina between the pedicles of T10 and T11. They emerge above the transverse processes of T11 and pass into the intercostal spaces between the pleura and internal intercostal membrane (fascia), where each ramus receives at least one grey (proximal) and white (distal) rami communicantes from adjacent sympathetic ganglia.

The rami then pass below the intercostal vessels in the neurovascular plane between the tenth internal and innermost intercostal muscles. Before reaching the costal angle they give rise to collateral and lateral branches. The collateral branches follow the inferior borders of the intercostal spaces. Near the end of the intercostal spaces they pass between the digitations of the diaphragm and transversus abdominis to run in the neurovascular plane between transversus abdominis and internal oblique. At the lateral edge of rectus abdominis they pierce the posterior layer of the internal oblique aponeurosis to supply rectus abdominis and terminate in the overlying skin as the tenth anterior cutaneous nerves of the thorax. The lateral cutaneous branches pierce the intercostal muscles obliquely and then divide into anterior and posterior branches, which pierce serratus anterior to supply the overlying skin and a strip of skin over the abdomen.

Supply

The tenth thoracic ventral rami supply the tenth intercostal muscles and adjacent skin over the front and side of the chest, the abdominal muscles and a strip of skin overlying them, as well as sensory innervation to the costal part of the diaphragm.