The dorsal branch of each posterior intercostal artery arises close to its origin and passes posteriorly between the necks of adjacent ribs, lateral to the vertebral body and medial to the superior costotransverse ligament. Each dorsal branch crosses the transverse processes with the dorsal rami of the thoracic spinal nerves, which supply the postvertebral muscles. They give rise to cutaneous and spinal branches, the latter entering the vertebral canal via the intervertebral foramina.