

The second thoracic ventral rami pass into the intercostal space between the pleura and internal intercostal membrane (fascia). They then pass below the intercostal vessels in the neurovascular plane between the second internal and innermost intercostal muscles below the intercostal vessels. Before reaching the costal angle they give rise to lateral and collateral branches.

The **second lateral cutaneous branch** (intercostobrachial nerve) pierces the intercostal muscles obliquely and passes over the axilla to reach the arm on its medial aspect, where it connects with a branch of the medial cutaneous nerve of the arm. It perforates the deep fascia and provides branches to the skin of the superior part of the posterior and medial surface of the arm. Here it joins the posterior cutaneous branch of the radial nerve.

The **second anterior cutaneous branch** is the terminal part of the collateral nerve. The collateral nerve follows the inferior border of the intercostal space to pierce the internal intercostal muscle, external intercostal membrane and pectoralis major muscle near the sternum where it becomes the second anterior cutaneous branch of the thorax and terminates in the overlying skin. The second anterior cutaneous branches may join the medial supraclavicular nerves.

Supply

The second lateral cutaneous branch supplies skin over the second intercostal space and adjacent parts of the third intercostal space. It also supplies the skin of the superior part of the posterior and medial surface of the arm. The anterior cutaneous branches supply skin over the anterior thoracic wall.