

The second rib is twice as long as the first and has a similar curvature. Its outer surface faces supero-laterally and the inner infero-medially, while the borders face supero-medially and infero-laterally. The **head** has two facets separated by a ridge (crest), which attaches to the T1/T2 intervertebral disc via the intra-articular ligament. The lower facet articulates with the superior border of the second thoracic vertebral body and the upper facet with the inferior border of the first thoracic vertebral body. The neck is flattened antero-posteriorly and gives attachment to the costotransverse ligaments. The prominent tubercle, at the junction of the neck and shaft, is convex superiorly. It has an oval facet medially for articulation with the transverse process of T2, and a non-articular area laterally for attachment of the lateral costotransverse ligament. Lateral to the tubercle is the angle. The convex outer surface has a roughened area centrally, which continues towards the tubercle as a roughened ridge. The concave anterior end of the rib is attached to the sternal angle (junction of the manubrium and body of the sternum) by a costal cartilage.

Ossification

The second rib ossifies from primary and secondary centers. The primary ossification center for the shaft appears near the angle during the eighth week in-utero, and secondary ossification centers for the head and articular and non-articular parts of the tubercle appear during puberty and fuse with the shaft after the age of 20 years.