The third thoracic vertebra (T3) is a typical thoracic vertebra with a heart-shaped body and a small, circular vertebral foramen; it has the smallest body of all of the thoracic vertebrae. On each side of the body are two costal demifacets for articulation with the heads of the third (superior facet) and fourth ribs (inferior facet) .

From the vertebral body pedicles project posteriorly and the short, thick laminae project postero-medially, overlapping the laminae of the vertebra below. A spinous process projects postero-inferiorly from the junction of the laminae. Anteriorly and infero-medially facing facets are located on the inferior articular processes that project from the inferior articular laminae. The pediculo-laminar junctions give rise to thin, flat superior articular processes, which face posteriorly and supero-laterally and support the oval superior articular facets. Also projecting postero-laterally from the pediculo-laminar junctions are the transverse processes, which display concave oval facets on their anterior surfaces for articulation with the tubercles of the third ribs.

Ossification

The centrum and each half of the vertebral arch ossify from single centers that appear in-utero in the seventh week and fourth month, respectively. The arches unite during the first year and then join with the vertebral body by the fourth year. The ring apophyses (or epiphyseal rings) form secondary ossification centers at approximately 12 years and fuse with the vertebral body between the ages of 14 and 25 years. At 16 years centers also appear at the tips of the transverse and spinous processes and fuse with the rest of the vertebra by 25 years.

Secondary ossification centers may remain unfused at these sites and are known as accessory ossification centers. They must be differentiated from fracture on plain-film radiographs.