The spinous process of the fifth lumbar vertebra is the smallest of the lumbar spinous processes and its apex is often rounded and directed inferiorly. The process is quadrangular in shape and arises from the junction between the laminae, at the level of the lower half of the vertebral body; the posterior margin can be palpated in the midline.

The supraspinous ligament and posterior layer of the thoracolumbar fascia are attached to the apex of the spinous process and the interspinous ligament and the interspinales muscles are attached to the superior and occasionally inferior borders. Further, multifidus and erector spinae attach to the lateral surface of the spinous process antero-posteriorly.