The radiate ligaments are three bands of fibers. They connect the rib head from a point on its anterior aspect, lateral to the articular surface, to the bodies of the two adjacent vertebral bodies and intervening intervertebral disc under cover of the lateral part of the anterior longitudinal ligament. Superior fibers ascend to the vertebral body above; inferior fibers descend to the vertebral body below. Shorter, less distinct intermediate fibers pass horizontally to attach to the disc. The superior fibers of the first costovertebral joint ascend to C7, while at the level of the tenth to twelfth joints the radiate ligament is less well developed.