

Anatomy of The Spine

The Vertebral Endplate

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The vertebral endplates are comprised of a relatively thin layer of cartilage that lies between the disc and the vertebral body. Endplates are approximately 1 mm thick along the periphery and are somewhat thicker within their central portions. The vertebral endplate is made up of two types of cartilage. The vertebral endplates help prevent the undersurface of the vertebral bodies from becoming damaged due to sustained and heavy loads. If sustained pressure is applied directly to bone, it can result in a loss of bone integrity with resultant fracture.

The intervertebral disc can herniate (rupture) through a weakened area of an endplate. This is referred to as a Schmorl's node. With advancing age, the vertebral endplates begin to calcify and stiffen which contributes to degeneration of the intervertebral disc.