

Disc and vertebral wedging in patients with progressive scoliosis

I A Stokes ¹, D D Aronsson

Affiliations + expand

PMID: 11481553 DOI: [10.1097/00002517-200108000-00006](#)

Abstract

A retrospective longitudinal radiographic study of patients with progressive scoliosis was conducted to determine the relative amount of wedging between vertebrae and discs as a function of progression of the scoliosis curve, cause of the scoliosis, and anatomic curve region. Posteroanterior radiographs of 27 patients with idiopathic scoliosis and of 17 patients with scoliosis associated with cerebral palsy were studied. The amount of wedging of vertebrae and discs at the curve apex was measured by the Cobb method and expressed as a proportion of the curve's Cobb angle. On average, the relative amount of vertebral and disc wedging did not differ significantly between initial and follow-up radiographs made after progression of the scoliosis. In both groups of patients, the mean vertebral wedging was more than the disc wedging in the thoracic region; the converse was found in curves in the lumbar and thoracolumbar regions. The patients with scoliosis associated with cerebral palsy had curves that were longer and more commonly in the thoracolumbar and lumbar regions. The relative wedging did not change significantly with curve progression and did not appear to differ by diagnosis. In the management of scoliosis, including small curves, it should be recognized that both the vertebrae and discs have a wedging deformity.