Lumbosacral Spondyloptosis

Lumbosacral spondyloptosis, by definition, is more than 100% anterior displacement of the L5 vertebra with regard to the sacrum. It is also known as grade 5 spondylolisthesis 1) 2) 3).

Case reports

A 4-year-old girl was admitted to the emergency department after having been buried beneath a wall. A computed tomography scan revealed anterior grade V L5-S1 spondylolisthesis, and magnetic resonance imaging showed a traumatic rupture of the fibrous annulus of the L5-S1 intervertebral disc and lesion of the anterior longitudinal and yellow ligaments. The patient underwent anterior and posterior fixation. Four months later she was able to walk independently, despite a persistent left foot drop. Additionally, Yamaki et al., from the University of Sao Paulo, Brazil. conducted a literature review on lumbosacral spondyloptosis in the pediatric population published between 1990 and 2017. They found 16 cases, 86.6% of which were male, with a mean patient age of 16 ± 5.05 years. Most patients underwent spine instrumentation. Based on the data reviewed, the neurological status at admission might be a valid predictor of outcome. Pedicle screws are a safe and reliable procedure for stable fixation of the spine in these cases. The removal of screws is discouraged 4 .

A 28-year-old man presented with severe low back pain, numbness at the soles of feet, and bowel and bladder dysfunction. Two days before admission, a tree trunk fell on his back while he was seated. A two-stage posterior-anterior procedure was performed. At the first stage, posterior decompression, reduction, and fusion with instrumentation were performed. At the second stage, which was performed 6 days after the first stage, the patient underwent anterior lumbar interbody fusion. The patient received physical therapy 1 week after the second stage. Results The patient's numbness improved immediately after the first posterior surgery. His fecal and urinary incontinence improved 6 months after discharge. He has been pain-free for a year and has returned to work.

A PubMed search was performed using the following keywords: lumbosacral spondyloptosis, lumbosacral dislocation, and L5-S1 traumatic dislocation. The search returned only nine reported cases of traumatic spondyloptosis. Traumatic spondyloptosis at the lumbosacral junction is a rare ailment that should be suspected in cases of high, direct, and posterior impact on the low lumbar area, and surgical treatment should be the standard choice of care ⁵⁾.

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