

11 Pfirrmann Magnetic Resonance Classification of Lumbar Intervertebral Disc Degeneration

Pfirrmann CW, Metzdorf A, Zanetti M, et al (2001) Magnetic resonance classification of lumbar intervertebral disc degeneration. *Spine*; 26:1873-1878.

SCALE DESCRIPTION

Using T2-weighted magnetic resonance imaging lumbar disc degeneration is graded according to the following:

- Grade I—Structure of the disc is homogenous, with a bright hyperintense white signal intensity and a normal disc height
- Grade II—Structure of the disc is inhomogenous, with a hyperintense white signal, distinction between nucleus and annulus is clear, with normal disc height, with or without horizontal gray bands
- Grade III—Structure of the disc is inhomogenous, with an intermediate gray signal intensity, distinction between nucleus and annulus is unclear, disc height is normal or slightly decreased
- Grade IV—Structure of the disc is inhomogenous, with a hypointense dark gray signal intensity, distinction between nucleus and annulus is lost, disc height is normal or moderately decreased
- Grade V—Structure of the disc is inhomogenous, with a hypointense black signal intensity, distinction between nucleus and annulus is lost, disc space is collapsed

Interpretation:

The higher the grade, the greater the severity.

SCALE ILLUSTRATION

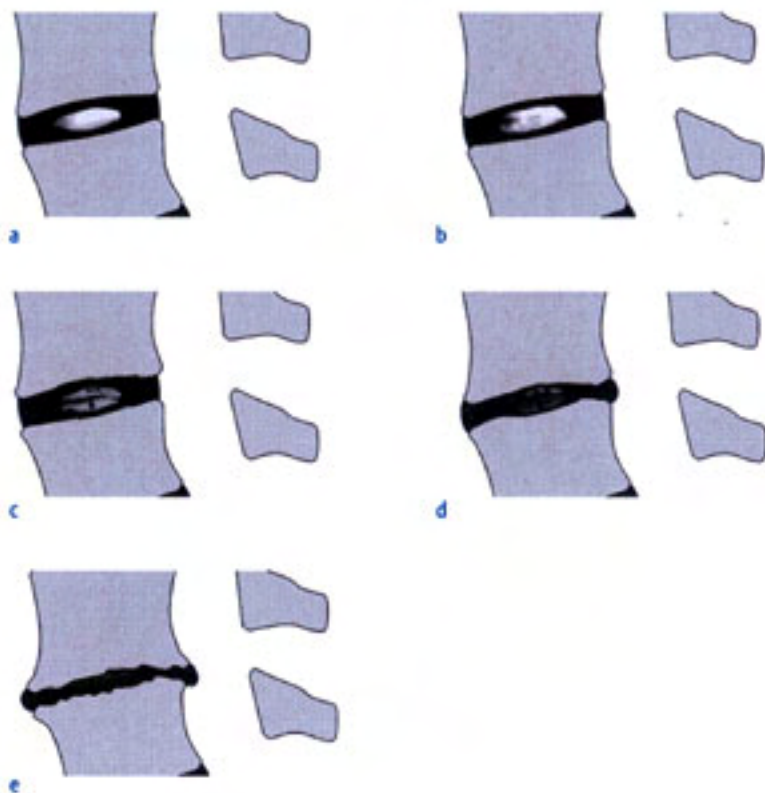


Fig 5.4.2.11-1a-e

- a Grade I.
- b Grade II.
- c Grade III.
- d Grade IV.
- e Grade V.