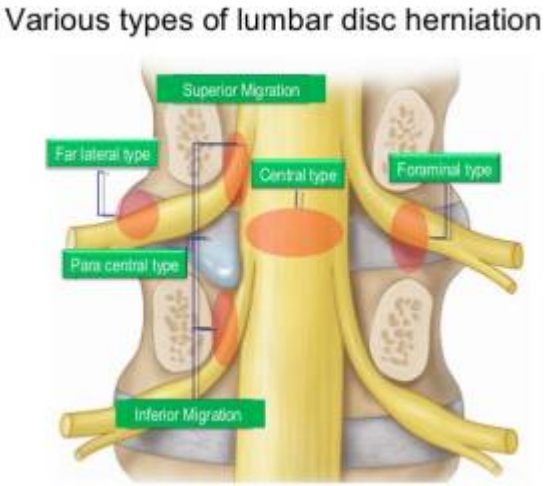
Lumbar Disc Herniation Classification

- Early effectiveness of posterior 180-degree decompression via unilateral biportal endoscopy in treatment of lumbar spinal stenosis combined with MSU-1 lumbar disc herniation
- Clinical and Economic Outcomes of Intradiscal Injection of Condoliase for a Treatment of Lumbar Disc Herniation with Severe Low Back Pain: A Multicenter Study
- Validity and accuracy of swespine data on surgery for central lumbar spinal stenosis and lumbar disc herniation: a cohort study of 796 patients
- Impact of obesity severity on postoperative outcomes and recovery progress in patients undergoing unilateral biportal endoscopy for degenerative lumbar disc herniation
- Guiding significance of the autophagy intensity of lumbar intervertebral discs and the Charlson Comorbidity Index in predicting the postoperative curative effect of patients with single-level lumbar disc herniation
- A meta-analysis of percutaneous endoscopic discectomy and microdiscectomy for lumbar disc herniation: assessing surgical efficacy and clinical outcomes
- The "horizon grey band" represents normal nucleus pulposus cells condense rather than intervertebral disc degeneration signal
- Management of Anticoagulant and Antiplatelet Therapy in Elective Degenerative Lumbosacral Spine Surgery: A Clinical Study on 578 Elderly Patients



The most commonly used and studied classification system for lumbar nerve root compression includes proposed nomenclature by Pfirrmann grading system and van Rijn [1)]. After pooling the interobserver agreement of various nomenclature systems, there is level 1 and 2 evidence to suggest that the CTF classification of lumbar disc disease has a significant interobserver agreement and van Rijn et al.’s criteria of lumbar nerve root compression have a significant interobserver agreement. These nomenclature systems are the most reliable for describing lumbar disc/nerve root pathology.

The Combined Task Force (CTF) and van Rijn classification systems are the most reliable methods for describing lumbar disc herniation and nerve root compression, respectively. Van Rijn dichotomized nerve roots from “definitely no root compression, possibly no root compression, indeterminate root compression, possible root compression, and definite root compression” into no root compression (first three categories) and root compression (last two categories). The CTF classification defines lumbar discs as normal, focal protrusion, broad-based protrusion, or extrusion. The CTF classification

system excludes “disc bulges,” which is a source of confusion and disagreement among many practitioners. This potentially accounts for its improved reliability compared with other proposed nomenclature systems [2)].

In 1994, based on a review of the published literature, the most commonly used and studied classification systems for lumbar disc herniation include the Combined Task Force Classification (CTF) and Jensen systems [3)].

Age-Related

Pediatric lumbar disc herniation

Pediatric lumbar disc herniation.

Localization

Michigan State University Classification for Lumbar Disc Herniation

Michigan State University Classification for Lumbar Disc Herniation.

Upper Lumbar Disc Herniation

Upper Lumbar Disc Herniation.

Lower Lumbar Disc Herniation

Lower Lumbar Disc Herniation (L4-S1)

Extreme lateral lumbar disc herniation

Extreme lateral lumbar disc herniation.

Foraminal lumbar disc herniation considered some authors a type of extreme lateral lumbar disc herniation.

Intraforaminal lumbar disc herniation

Extraforaminal lumbar disc herniation

Central lumbar disc herniation

Axillary lumbar disc herniation

Recurrent lumbar disc herniation

Lumbar disc herniation regression.

Migrated lumbar disc herniation

Migrated lumbar disc herniation.

1)
van Rijn JC, Klemetsö N, Reitsma JB, Majoie CB, Hulsmans FJ, Peul WC, Stam J, Bossuyt PM, den Heeten GJ. Observer variation in MRI evaluation of patients suspected of lumbar disk herniation. AJR Am J Roentgenol. 2005 Jan;184(1):299-303. doi: 10.2214/ajr.184.1.01840299. Erratum in: AJR Am J Roentgenol. 2005 Mar;184(3):1027. PMID: 15615992.
2)
Li Y, Fredrickson V, Resnick DK. How should we grade lumbar disc herniation and nerve root compression? A systematic review. Clin Orthop Relat Res. 2015 Jun;473(6):1896-902. doi: 10.1007/s11999-014-3674-y. Review. PubMed PMID: 24825130; PubMed Central PMCID: PMC4418997.
3)
Jensen MC, Brant-Zawadzki MN, Obuchowski N, Modic MT, Malkasian D, Ross JS. Magnetic resonance imaging of the lumbar spine in people without back pain. N Engl J Med. 1994 Jul 14;331(2):69-73. PubMed PMID: 8208267.