

Bandscheiben Nomenklatur



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Review Article

Lumbar disc nomenclature: version 2.0

Recommendations of the combined task forces of the North American Spine Society, the American Society of Spine Radiology and the American Society of Neuroradiology

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Übersicht Klassifikation

Definitionen:

Sklerose (Osteose)-

- I° - optisch wahrnehmbare vermehrte Sklerose
- II° - HWS - > 1 mm Sklerose der WK-Abschlussplatten
- BWS/LWS - > 2 mm Sklerose der WK-Abschlussplatten

Chondrose –

- I° - Höhenminderung mittig $\geq 1/5$ bis $1/3$; (HWS bis $1/2$)
- II° - Höhenminderung mittig $> 1/3$ bis $1/2$ (HWS $> 1/2$)
- III° - Höhenminderung mittig $> 1/2$
- IV° - Ankylosierende Chondrose

Spondylose –

- I° - HWS/obere BWS bis 1 mm; untere BWS/LWS bis 2 mm
- II° - HWS/obere BWS bis 2-3 mm; untere BWS/LWS bis 3-5 mm
- III° - HWS/obere BWS über 3 mm; untere BWS/LWS über 5 mm
- IV° - Tendenzielle und vollständige Brückenbildung

Retrospondylose –

- I° - bis 2 mm
- II° - > 2 mm

Spondylarthrose –

- I° - vermehrte Sklerose der Wirbelgelenke erkennbar
- II° - plus Verplumpungen od. Randanbauten der Wirbelgelenke

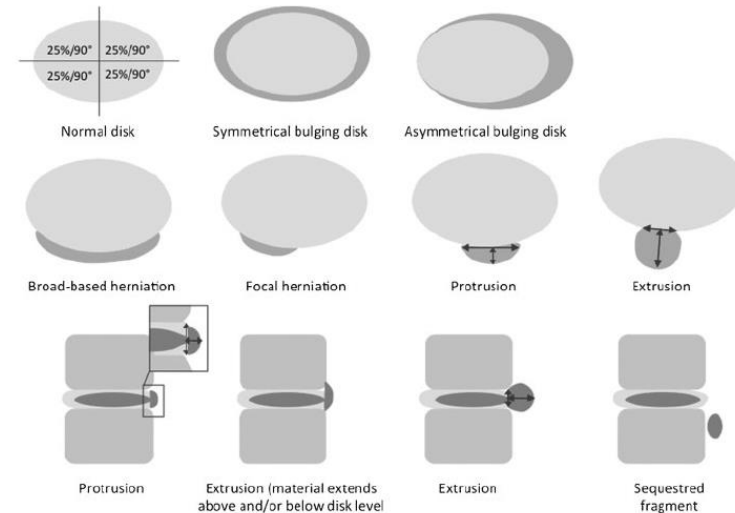
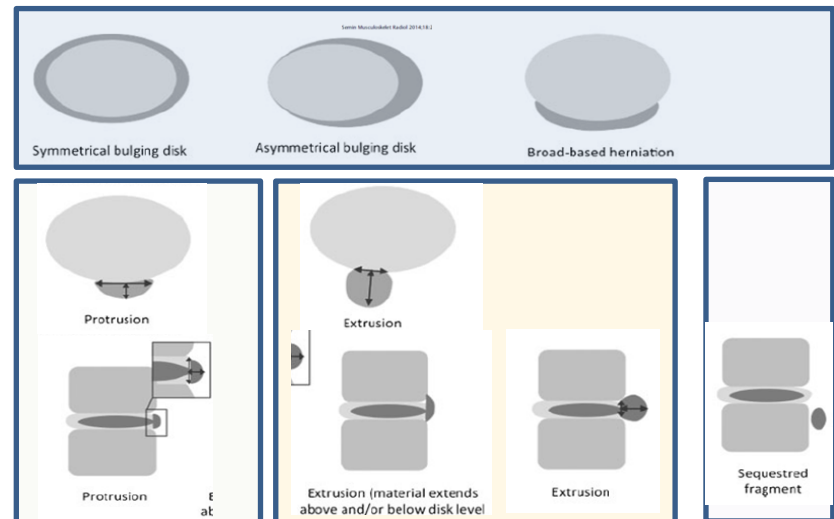


Fig. 13 Nomenclature and classification of lumbar disk pathology according to the North American Spine Society, the American Society of Spine Radiology, and the American Society of Neuroradiology.²³



Bulging

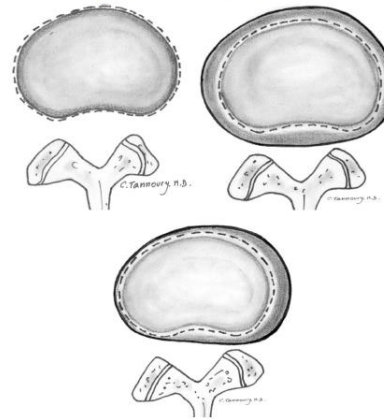


Fig. 3. Bulging disc. (Top Left) Normal disc (for comparison); no disc material extends beyond the periphery of the disc space, depicted here by the broken line. (Top Right) Symmetric bulging disc; annular tissue extends, usually by less than 3 mm, beyond the edges of the vertebral apophysis symmetrically throughout the circumference of the disc. (Bottom) Asymmetric bulging disc; annular tissue extends beyond the edges of the vertebral apophysis, asymmetrically greater than 25% of the circumference of the disc.

Protrusion

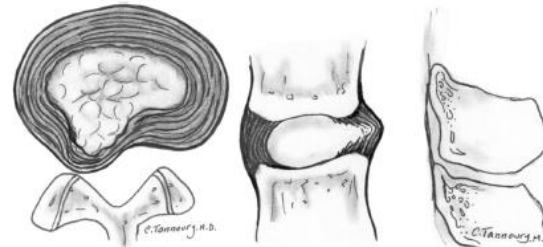


Fig. 4. Herniated disc: protrusion. (Left) Axial and (Right) sagittal images demonstrate displaced disc material extending beyond less than 25% of the disc space, with the greatest measure, in any plane, of the displaced disc material being less than the measure of the base of displaced disc material at the disc space of origin, measured in the same plane.

Extrusion

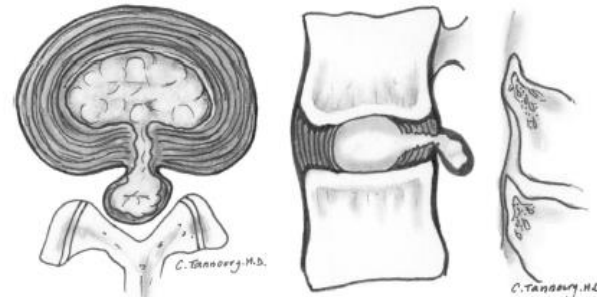


Fig. 5. Herniated disc: extrusion. (Left) Axial and (Right) sagittal images demonstrate that the greatest measure of the displaced disc material is greater than the base of the displaced disc material at the disc space of origin, when measured in the same plane.

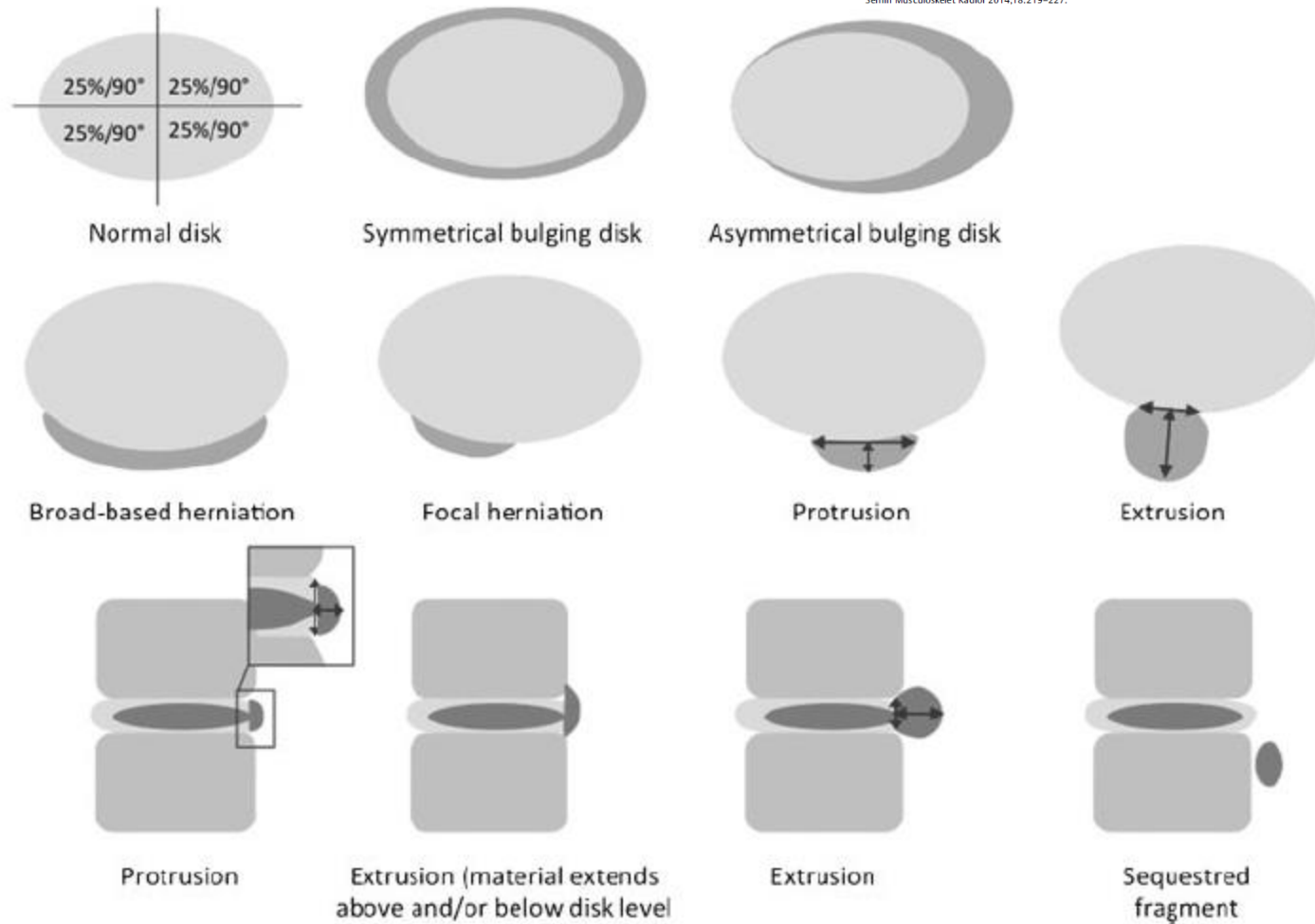


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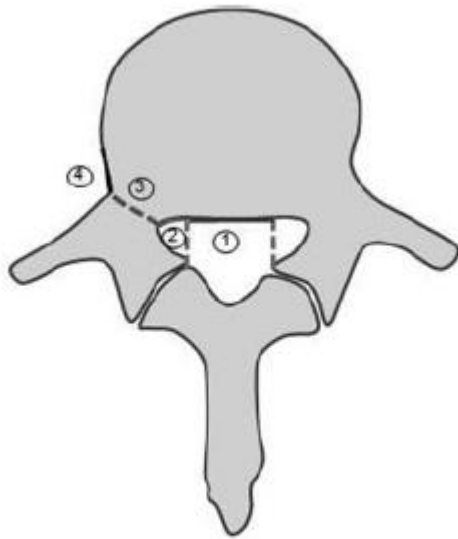


Fig. 14 Anatomical zones for the description of displaced disk material on transverse images as recommended by the classification of the North American Spine Society and other organizations. 1, Central zone; 2, subarticular zone; 3, foraminal; 4, extraforaminal zone.

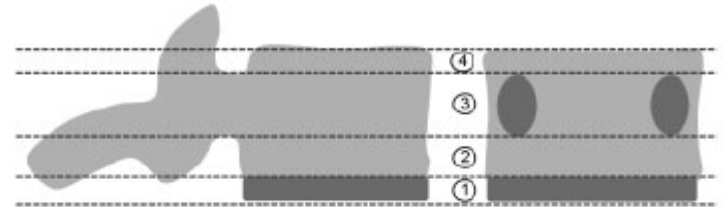
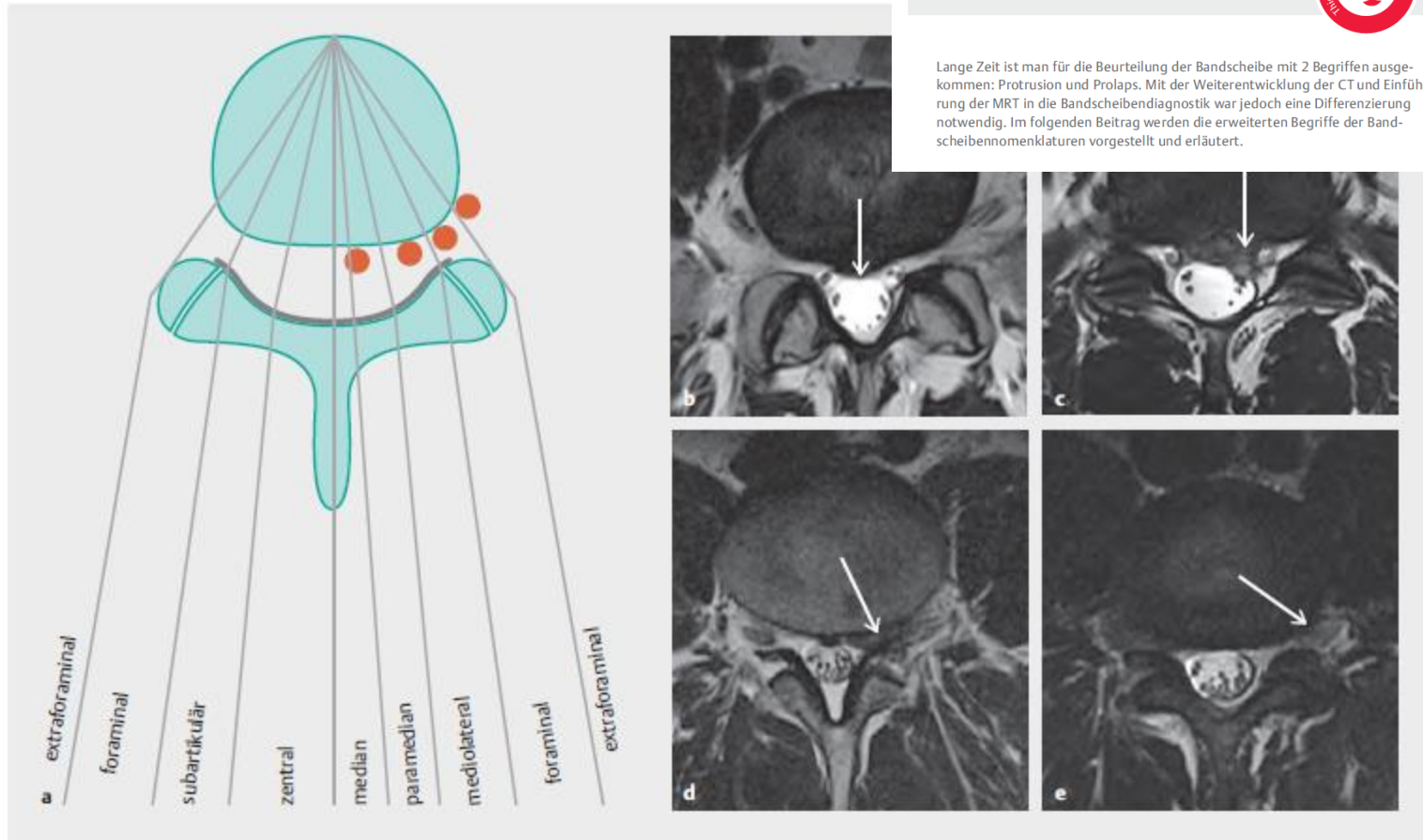


Fig. 15 Anatomical levels for the description of displaced disk material on sagittal and coronal images as recommended by the classification of the North American Spine Society and other organizations. 1, Disk level; 2, infrapedicular level; 3, pedicular level; 4, suprapedicular level.

Nomenklatur der (lumbalen) Bandscheiben

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► **Abb. 4** Position von Bandscheibenherniationen. **a** Je nach Klassifikation unterscheidet man einen medianen von einem paramedianen Abschnitt. Beide überlappen sich weitgehend mit der Angabe eines zentralen Abschnitts. Ist die Bandscheibenherniation weiter lateral gelegen, spricht man auch von einer mediolateralen Position, für die auch der Begriff zentral noch zutrifft und die sich teilweise mit einer subartikulären Position überlappt. Einheitlich sind die Bezeichnungen für eine foraminalen, nämlich im Neuroforamen gelegene Bandscheibenherniation, und eine noch weiter lateral davon gelegene – extraforaminalen – Herniation. **b** Mediane Bandscheibenherniation auf einer axialen T2w MR-Aufnahme. **c** Mediolaterale Bandscheibenherniation auf einer axialen T2w MR-Aufnahme. **d** Foraminalen Bandscheibenherniation auf einer axialen T2w MR-Aufnahme. **e** Extraforaminalen Bandscheibenherniation auf einer axialen T2w MR-Aufnahme.

Nomenklatur Bandscheiben

Measurements and Classifications in Spine Imaging

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