

Two cadavers were dissected to analyze the percutaneous corridor. Subsequently, 28 ovine had their annulus fibrosus punctured via awl penetration under fluoroscopic control and nucleus pulposus tissue removed via rongeur. Efficacy was assessed by animal morbidity, ease of access to T12-S1 disc spaces, and production of a mechanical injury as verified by discography, radiography, and histology.

T12-S1 were accessible with minimal nerve damage morbidity. Scar tissue sealed the disc puncture site in all animals within 6 weeks, withstanding 1 MP of intradiscal pressure. Partial nucleotomy led to a significant reduction in intervertebral disk height and an increased histological degeneration score.

Inducing a reproducible injury pattern of disc degeneration required minimal time, effort, and equipment. The posterolateral approach allows operation on several discs within a single surgery and multiple animal surgeries within a single day ¹⁾.

¹⁾

Schwan S, Ludtka C, Wiesner I, Baerthel A, Friedmann A, Göhre F. Percutaneous posterolateral approach for the simulation of a far-lateral disc herniation in an ovine model. *Eur Spine J.* 2017 Oct 27. doi: 10.1007/s00586-017-5362-6. [Epub ahead of print] PubMed PMID: 29080003.

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