

**Herniated Disc:
update searches and screening
for
Universitätsklinikum Schleswig-Holstein/Campus Kiel**



Kleijnen Systematic Reviews Ltd

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1. PROJECT OBJECTIVES

A key aim of the research project “Making SDM a reality” is to inform patients as part of shared decision making (SDM).

Kleijnen Systematic Reviews (KSR) Ltd has prepared an evidence report with a synthesis of the evidence of treatment options for herniated disc.

2. METHODS

LITERATURE SEARCHES

Literature searches were conducted to identify systematic reviews and evidence-based guidelines about herniated disc to update the 2019 evidence report.

The search strategies were developed specifically for each database and the keywords adapted according to the configuration of each database. Searches were limited by date range to update earlier searches: 2019-2021. Searches were not limited by language or publication status.

SEARCH SOURCES

Systematic reviews and guidelines

The following systematic review and health technology assessment specific databases were searched:

- Cochrane Database of Systematic Reviews (CDSR) (Wiley): issue 10 of 12, October 2021
- KSR Evidence (Internet) (<https://ksrevidence.com/>): 2019-2021
- Epistemonikos (Internet) (<https://www.epistemonikos.org/>): 2019-2021
- International HTA Database (INAHTA) (<https://database.inahta.org/>): 2019-2021

The following guidelines resources were searched:

- Guidelines International Network (GIN) (Internet) (<https://www.g-i-n.net/home>): 2019-2021
- NICE Evidence (Internet) (www.evidence.nhs.uk/): 2019-2021
- NICE Guidance (Internet) (<https://www.nice.org.uk/guidance>): 2019-2021
- ECRI Guidelines Trust (Internet) (<https://guidelines.ecri.org/>): 2019-2021
- Trip Database (<https://www.tripdatabase.com/>): 2019-2021
- Canadian Agency for Drugs and Technologies in Health (CADTH) (www.cadth.ca): 2019-2021

Full details of all search strategies are presented in Appendix 1.

Handling of citations

References identified from the searches were downloaded into EndNote bibliographic management software for further assessment and handling.

Supplementary searches

The bibliographies of included studies and review articles were also checked for additional relevant articles.

Prioritisation

During formal screening of titles and abstracts, studies were subject to a prioritisation process whereby the recency e.g., to most up-to-date clinical practice guidelines (CPG), methodological quality e.g., Cochrane systematic review (CSR), quality of the analyses per outcome (e.g., ratio of RCTs to observational studies), the number of included RCTs, the breadth of the timepoints reported etc. were considered to further prioritise which studies would be used to inform analyses. Studies were categorised into the following three categories: '1' = German, American, European or similar CPG; '2' = CSR or similar quality SR; '3' = potentially lower/other quality SR.

3. RESULTS

The original EBSCO searches were conducted on January 11, 2019; and of the 183 references screened, 29 studies were deemed eligible. In the current update, a total of 346 records were retrieved from the electronic literature searches (Appendix 1). After the removal of duplicate records 255 titles and abstracts were screened by two reviewers. Forty-nine records were found to be potentially eligible and were longlisted after a consensus. Of those, four were short-listed and included in the analyses (Table 1).¹⁻⁴ See also Table 2 for an overview of primary studies included in the identified SRs/CPGs.

UPDATE – Concluding Assessment by SHARE TO CARE Evidence Team (19/07/22)

Based on the update searches conducted by KSR Ltd in October 2021, we want to highlight the following aspects: the effectiveness of epidural injections regarding both, short- and long-term results, has been reinforced by a systematic review by Smith et al. (2019) and a recent clinical practice guideline by Manchikanti et al. (2021). Arts et al. (2019) reported favourable leg and back pain outcomes after surgery (lumbar discectomy) compared to continued conservative care.

Conclusion regarding the evidence report: No full evidence update required. The former evidence report (January 08, 2019) remains valid until further notice.

Table 1 Evidence sources

Study/year	Evidence type	Primary studies	Number of studies	Intervention(s)	Comparator(s)	Outcome(s)	Date searched	Conclusions
Manchikanti 2021 ¹	CPG	SR,RCT	90	Multiple	Multiple	Multiple	November 2020	"These epidural intervention guidelines including percutaneous adhesiolysis were prepared with a comprehensive review of the literature with methodologic quality assessment and determination of level of evidence with strength of recommendations"
Arts 2019 ²	SR	RCT,OS	14	Lumbar discectomy	Continuing conservative care	Pain and disability	May 31, 2018	"Results of a network meta-analysis show lumbar discectomy is more effective than continuing conservative care in alleviating symptoms of lumbar disc herniation refractory to initial conservative management"
Cheng 2020 ³	SR	RCT	7	Mechanical traction	Sham or no traction	Pain and function	July 2019	"Compared with sham or no traction, lumbar traction exhibited significantly more pain reduction and functional improvements in the short term, but not in the long term"
Smith 2020 ⁴	SR	RCT,OS	14*	Lumbar transforaminal injection	Multiple	Pain, patient satisfaction, functional improvement, pain medication, and avoidance of	N/M	"There is strong evidence that lumbar transforaminal injection of steroids is an effective treatment for radicular pain due to disc herniation"

Study/year	Evidence type	Primary studies	Number of studies	Intervention(s)	Comparator(s)	Outcome(s)	Date searched	Conclusions
						spinal surgery		
* = refers to studies published after 2015 CPG = clinical practice guideline; OS = observational study; RCT = randomised controlled trial.								

Table 2 Overview of primary studies included in the identified SRs/CPGs

Study/year	Primary study(ies)	Reference (first author & journal)
Manchikanti 2021 ¹	SR,RCT*	1. Lilly DT, Davison MA, Eldridge CM, et al. An assessment of nonoperative management strategies in a herniated lumbar disc population: Successes versus failures. <i>Global Spine J</i> 2020; 7:2192568220936217. 2. Manchikanti L, Pampati V, Parr III A, et al. Cervical interlaminar epidural injections in the treatment of cervical disc herniation, post surgery syndrome, or discogenic pain: Cost utility analysis from randomized trials. <i>Pain Physician</i> 2019; 22:421-431 3. Joswig H, Neff A, Ruppert C, Hildebrandt G, Stienen MN. Repeat epidural steroid injections for radicular pain due to lumbar or cervical disc herniation: What happens after 'salvage treatment'? <i>Bone Joint J</i> 2018; 100-B:1364-1371. 4. Taheri A, Khajenasiri AR, Nazemian Yazdi NA, Safari S, Sadeghi J, Hatami M. Clinical evaluation of percutaneous caudal epidural adhesiolysis with the Racz technique for low back pain due to contained disc herniation. <i>Anesth Pain Med</i> 2016; 6:e26749. 5. Moon SH, Park JY, Cho SS, et al. Comparative effectiveness of percutaneous epidural adhesiolysis for different sacrum types in patients with chronic pain due to lumbar disc herniation: A propensity score matching analysis. <i>Medicine (Baltimore)</i> 2016; 95:e4647. 6. Cho PG, Ji GY, Yoon YS, Shin DA. Clinical effectiveness of percutaneous epidural neuroplasty according to the type of surgical level lumbar disc herniation: A 12 month follow up study. <i>J Korean Neurosurg Soc</i> 2019; 62:681-690. 7. Moon SH, Lee JI, Cho HS, Shin JW, Koh WU. Factors for predicting favorable outcome of percutaneous epidural adhesiolysis for lumbar disc herniation. <i>Pain Res Manag</i> 2017; 2017:1494538 8. Manchikanti L, Pampati V, Benyamin RM, Hirsch JA. Cost utility analysis of lumbar interlaminar epidural injections in the treatment of lumbar disc herniation, central spinal stenosis, and axial or discogenic low back pain. <i>Pain Physician</i> 2017; 20:219-228.

Study/year	Primary study(ies)	Reference (first author & journal)
		9. Yin M, Mo W, Wu H, et al. Efficacy of caudal epidural steroid injection with targeted indwelling catheter and manipulation in managing patients with lumbar disk herniation and radiculopathy: A prospective, randomized, single-blind controlled trial. <i>World Neurosurg</i> 2018; 114:e29-e34 10. Arirachakaran A, Siripaiboonkij M, Pairuchvej S, et al. Comparative outcomes of epidural steroids versus placebo after lumbar discectomy in lumbar disc herniation: A systematic review and meta-analysis of randomized controlled trials. <i>Eur J Orthop Surg Traumatol</i> 2018; 28:1589-1599 11. Bhatia A, Flamer D, Shah PS, Cohen SP. Transforaminal epidural steroid injections for treating lumbosacral radicular pain from herniated intervertebral discs: A systematic review and meta-analysis. <i>Anesth Analg</i> 2016; 122:857-870 12. Lee JH, Choi KH, Kang S, et al. Nonsurgical treatments for patients with radicular pain from lumbosacral disc herniation. <i>Spine J</i> 2019; 19:1478-1489. 13. Hajiahmadi S, Shayganfar A, Askari M, Ebrahimian S. Interobserver and intraobserver variability in magnetic resonance imaging evaluation of patients with suspected disc herniation. <i>Heliyon</i> 2020; 6:e05201. 14. Maadawy AAE, Mazy A, Adrosy MEMME, El-Mitwalli AA, Naby AMAE, Gomma M. A comparative study between interlaminar nerve root targeted epidural versus infraneural transforaminal epidural steroids for treatment of intervertebral disc herniation. <i>Saudi J Anaesth</i> 2018; 12:599-605 15. Sari H, Misirlioglu TO, Palamar D. Regression of a symptomatic thoracic disc herniation with a calcified intervertebral disc component. <i>Acta Orthop Traumatol Turc</i> 2016; 50:698-701 16. Liu Z, Duan Y, Rong X, Wang B, Chen H, Liu H. Variation of facet joint orientation and tropism in lumbar degenerative spondylolisthesis and disc herniation at L4-L5: A systematic review and metaanalysis. <i>Clin Neurol Neurosurg</i> 2017; 161:41-447. 17. Court C, Mansour E, Bouthors C. Thoracic disc herniation: Surgical treatment. <i>Orthop Traumatol Surg Res</i> 2018; 104:S31-S40. 18. Lee J, Shin JS, Lee YJ, et al. Long-term course and predictive factors associated with disc resorption in lumbar disc herniation patients. <i>J Neurol Sci</i> 2017; 381:278 19. . Wang Y, Dai G, Jiang L, et al. The incidence of regression after the nonsurgical treatment of symptomatic lumbar disc herniation: A systematic review and meta-analysis. <i>BMC Musculoskelet Disord</i> 2020; 21:530. 20. Zhong M, Liu JT, Jiang H, et al. Incidence of spontaneous resorption of lumbar disc herniation: A meta-analysis. <i>Pain Physician</i> 2017; 20:E45-E52 21. Chen BL, Guo JB, Zhang HW, et al. Surgical versus non-operative treatment for lumbar disc herniation: A systematic review and metaanalysis. <i>Clin Rehabil</i> 2018; 32:146-160.

Study/year	Primary study(ies)	Reference (first author & journal)
		22. Shin JS, Lee J, Lee YJ, et al. Long-term course of alternative and integrative therapy for lumbar disc herniation and risk factors for surgery: A prospective observational 5-year follow-up study. <i>Spine (Phila Pa 1976)</i> 2016; 41:E955-E963 23. Ilyas H, Savage J. Lumbar disk herniation and SPORT: A Review of the literature. <i>Clin Spine Surg</i> 2018; 31:366-372. 24. Koltsov JCB, Smuck MW, Zagel A, et al. Lumbar epidural steroid injections for herniation and stenosis: Incidence and risk factors of subsequent surgery. <i>Spine J</i> 2019; 19:199-205. 25. Chen C, Fan P, Huang L, Zhen H, Liu L, Wang Y. Percutaneous endoscopic lumbar discectomy as an emergent surgery for cauda equina syndrome caused by lumbar disc herniation. <i>Pain Physician</i> 2020; 23:E259-E264. 26. Oster BA, Kikanloo SR, Levine NL, Lian J, Cho W. Systematic review of outcomes following 10-year mark of Spine Patient Outcomes Research Trial for intervertebral disc herniation. <i>Spine (Phila Pa 1976)</i> 2020; 45:825-831. 27. . Ercalik T, Kilic M. Efficacy of intradiscal ozone therapy with or without perforaminal steroid injection on lumbar disc herniation: A doubleblinded controlled study. <i>Pain Physician</i> 2020; 23:477-484. 28. Zhao W, Wang Y, Wu J, et al. Long-term outcomes of epidurals with lidocaine with or without steroids for lumbar disc herniation and spinal stenosis: A metaanalysis. <i>Pain Physician</i> 2020; 23:365-374. 29. Lee JH, Shin KH, Bahk SJ, et al. Comparison of clinical efficacy of transforaminal and caudal epidural steroid injection in lumbar and lumbosacral disc herniation: A systematic review and meta-analysis. <i>Spine J</i> 2018; 18:2343-2353. 30. Lee JH, Shin KS, Park SJ, et al. Comparison of clinical efficacy between transforaminal and interlaminar epidural injections in lumbosacral disc herniation: A systematic review and meta-analysis. <i>Pain Physician</i> 2018; 21:433-448. 31. Lee JH, Kim DH, Kim DH, et al. Comparison of clinical efficacy of epidural injection with or without steroid in lumbosacral disc herniation: A systematic review and meta-analysis. <i>Pain Physician</i> 2018; 21:449-468
Arts 2019 ²	RCT,OS*	1. Barth M, Fontana J, Thome C, et al. Occurrence of discal and non-discal changes after sequestrectomy alone versus sequestrectomy and implantation of an anulus closure device. <i>J Clin Neurosci</i> 2016;34:288–93. 2. Parker SL, Grahovac G, Vukas D, et al. Effect of an annular closure device (barricaid) on same-level recurrent disk herniation and disk height loss after primary lumbar discectomy: two-year results of a multicenter prospective cohort study. <i>Clin Spine Surg</i> 2016;29:454–60. 3. Thome C, Klassen PD, Bouma GJ, et al. Annular closure in lumbar microdiscectomy for prevention of reherniation: a randomized clinical trial. <i>Spine J</i> 2018

Study/year	Primary study(ies)	Reference (first author & journal)
Cheng 2020 ³	RCT*	1. Demirel A, Yorubulut M and Ergun N. Regression of lumbar disc herniation by physiotherapy: does non-surgical spinal decompression therapy make a difference? Doubleblind randomized controlled trial. J Back Musculoskelet Rehabil 2017; 30(5): 1015–1022. 2. Gulsen M, Atici E, Aytar A, et al. Effects of traction therapy in addition to conventional physiotherapy modalities on pain and functionality in patients with lumbar disc herniation: randomized controlled study. Acta Medica Mediterranea 2018; 34: 2017–2021. 3. Isner-Horobeti ME, Dufour SP, Schaeffer M, et al. Highforce versus low-force lumbar traction in acute lumbar sciatica due to disc herniation: a preliminary randomized trial. J Manipulative Physiol Ther 2016; 39(9): 645–654. 4. Murat S, Uzunca K and Erden N. The effect of lumbar traction with two different load on clinic and functional status of patients with subacute lumbar disc herniation. Medeniyet Medical Journal 2018; 33: 82–88
Smith 2020 ⁴	RCT,OS*	1. Bensler S, Sutter R, Pfirrmann CWA, Peterson CK. Particulate versus non-particulate corticosteroids for transforaminal nerve root blocks: Comparison of outcomes in 494 patients with lumbar radiculopathy. Eur Radiol 2018;28(3):946–52 2. Joswig H, Neff A, Ruppert C, Hildebrandt G, Stienen MN. The value of short-term pain relief in predicting the 1-month outcome of lumbar transforaminal epidural steroid injections. World Neurosurg 2017;159(2):291–300. 3. Singh JR, Cardozo E, Christolias GC. The clinical efficacy for two-level transforaminal epidural steroid injections. PM R 2017;9(4):377–82. 4. Tecer D, Adiguzel E, Tan AK, Taskaynatan MA. Role of magnetic resonance imaging in ascertaining the success of transforaminal epidural steroid injection for lumbar radicular pain. Pain Med 2017;18(4):645–50. 5. van Helvoirt H, Apeldoorn AT, Knol DL, et al. Transforaminal epidural steroid injections influence mechanical diagnosis and therapy (MDT) pain response classification in candidates for lumbar herniated disc surgery. J Back Musculoskelet Rehabil 2016;29(2):351–9. 6. Sariyildiz MA, Batmaz I, Yazmalar L, Gunes M, Turan Y. The effectiveness of transforaminal epidural steroid injections on radicular pain, functionality, psychological status and sleep quality in patients with lumbar disc herniation. J Back Musculoskelet Rehabil 2017;30(2):265–70. 7. Davis N, Hourigan P, Clarke A. Transforaminal epidural steroid injection in lumbar spinal stenosis: An observational study with two-year follow-up. Br J Neurosurg 2017;31(2):205–8. 8. Farooque M, Salzman MM, Ye Z. Effectiveness of bilateral transforaminal epidural steroid injections in degenerative lumbar spinal stenosis patients with neurogenic claudication: A case series. PM R 2017;9(1):26–31. 9. Pandey RA. Efficacy of epidural steroid injection in management of lumbar prolapsed intervertebral disc: A comparison of caudal, transforaminal and interlaminar routes. J Clin Diagn Res 2016;10 (7):Rc05–11.

Study/year	Primary study(ies)	Reference (first author & journal)
		10. Beyaz SG. Comparison of transforaminal and interlaminar epidural steroid injections for the treatment of chronic lumbar pain [in Portuguese]. <i>Rev Bras Anesthesiol</i> 2017;67(1):21–7. 11. Sariyildiz MA, Batmaz I, Yazmalar L, Gunes M, Turan Y. The effectiveness of transforaminal epidural steroid injections on radicular pain, functionality, psychological status and sleep quality in patients with lumbar disc herniation. <i>J Back Musculoskelet Rehabil</i> 2017;30(2):265–70. 12. Joswig H, Neff A, Ruppert C, Hildebrandt G, Stienen MN. The value of short-term pain relief in predicting the 1-month outcome of lumbar transforaminal epidural steroid injections. <i>World Neurosurg</i> 2017;159(2):291–300. 13. Maus TP, El-Yahouchi CA, Geske JR, et al. Imaging determinants of clinical effectiveness of lumbar transforaminal epidural steroid injections. <i>Pain Med</i> 2016;17(12):2176–84. 14. Singh JR, Cardozo E, Christolias GC. The clinical efficacy for two-level transforaminal epidural steroid injections. <i>PM R</i> 2017;9(4):377–82.
* = only studies published after 2015 were extracted OS = observational study; RCT = randomised controlled trial; SR = systematic review.		

REFERENCES

- [1] Manchikanti L, Knezevic NN, Navani A, Christo PJ, Limerick G, Calodney AK, et al. Epidural interventions in the management of chronic spinal pain: American Society of Interventional Pain Physicians (ASIPP) comprehensive evidence-based guidelines. *Pain Physician* 2021;24(S1):S27-S208.
- [2] Arts MP, Kursumovic A, Miller LE, Wolfs JFC, Perrin JM, Van de Kelft E, et al. Comparison of treatments for lumbar disc herniation: systematic review with network meta-analysis. *Medicine* 2019;98(7):e14410.
- [3] Cheng YH, Hsu CY, Lin YN. The effect of mechanical traction on low back pain in patients with herniated intervertebral disks: a systemic review and meta-analysis. *Clin Rehabil* 2020;34(1):13-22.
- [4] Smith CC, McCormick ZL, Mattie R, MacVicar J, Duszynski B, Stojanovic MP. The effectiveness of lumbar transforaminal injection of steroid for the treatment of radicular pain: a comprehensive review of the published data. *Pain Med* 2020;21(3):472-87.

APPENDIX 1: SEARCH STRATEGIES

Shared Decision Making: Herniated Disc update (EBSCO)

Table 3. Systematic reviews and guideline search results

Database	Dates	Results
CDSR	2019 - Issue 10, October 2021	0
KSR Evidence	2019-2021	162
Epistemonikos	2019-2021	72
INAHTA	2019-2021	2
NICE Evidence	01/01/2019 - 05/10/2021	25
NICE Guidance	2019-2021	3
GIN	2019-2021	0
ECRI	2019-2021	1
Trip	2019-2021	81
CADTH	2019-2021	0
Total		346
Total after de-duplication		255

Search strategies

Cochrane Database of Systematic Reviews (CDSR) (Wiley): Issue 10 of 12, October 2021
Searched: 5.10.21

#1 MeSH descriptor: [Intervertebral Disc Displacement] explode all trees 915
#2 ((hernia* or interverteb* or slipped or prolapse* or protru* or displac* or ruptur*)
near/3 (disc* or disk* or pulpo*)):ti,ab,kw 4182
#3 #1 or #2 with Cochrane Library publication date Between Jan 2019 and Dec 2021, in
Cochrane Reviews, Cochrane Protocols 0

KSR Evidence (Internet): Database last updated 5 October 2021

<https://ksrevidence.com/>

Searched: 5.10.21

1 (hernia* or interverteb* or slipped or prolapse* or protru* or displac* or ruptur*)
near/3 (disc* or disk* or pulpo*) in All text Date published: 2019 - 2021 **162 results**
Search run Tue Oct 05 2021

Epistemonikos (Internet): up to 5 October 2021

<https://www.epistemonikos.org/en/>

Searched: 5.10.21

(title:("herniated disc" OR "herniated discs" OR "herniated disk" OR "herniated disks" OR
"intervertebral disc" OR "intervertebral discs" OR "intervertebral disk" OR "intervertebral
disks" OR "slipped disc" OR "slipped discs" OR "slipped disk" OR "slipped disks" OR
"prolapsed disc" OR "prolapsed discs" OR "prolapsed disk" OR "prolapsed disks" OR "disc

protrusion" OR "discs protrusion" OR "disk protrusion" OR "disks protrusion" OR "displaced disc" OR "displaced discs" OR "displaced disk" OR "displaced disks" OR "ruptured disc" OR "ruptured discs" OR "ruptured disk" OR "ruptured disks") OR abstract:("herniated disc" OR "herniated discs" OR "herniated disk" OR "herniated disks" OR "intervertebral disc" OR "intervertebral discs" OR "intervertebral disk" OR "intervertebral disks" OR "slipped disc" OR "slipped discs" OR "slipped disk" OR "slipped disks" OR "prolapsed disc" OR "prolapsed discs" OR "prolapsed disk" OR "prolapsed disks" OR "disc protrusion" OR "discs protrusion" OR "disk protrusion" OR "disks protrusion" OR "displaced disc" OR "displaced discs" OR "displaced disk" OR "displaced disks" OR "ruptured disc" OR "ruptured discs" OR "ruptured disk" OR "ruptured disks")); Publication year: Custom year range: From 2019 To 2021; Publication Type: Systematic Review

Records retrieved 72

International HTA Database (INAHTA): up to 5 October 2021

<https://database.inahta.org/>

Searched: 5.10.21

1 "Intervertebral Disc Displacement"[mh] 13
 2 "herniated disc" OR "herniated discs" OR "herniated disk" OR "herniated disks" OR "intervertebral disc" OR "intervertebral discs" OR "intervertebral disk" OR "intervertebral disks" OR "slipped disc" OR "slipped discs" OR "slipped disk" OR "slipped disks" OR "prolapsed disc" OR "prolapsed discs" OR "prolapsed disk" OR "prolapsed disks" OR "disc protrusion" OR "discs protrusion" OR "disk protrusion" OR "disks protrusion" OR "displaced disc" OR "displaced discs" OR "displaced disk" OR "displaced disks" OR "ruptured disc" OR "ruptured discs" OR "ruptured disk" OR "ruptured disks" 52
 3 #2 OR #1 **YEAR 2019 TO 2021 2**

NICE Evidence Search (Internet): up to 5 October 2021

<https://www.evidence.nhs.uk/>

Searched: 5.10.21

Search terms	Results (Guidance; Systematic Reviews): 01/01/2019-05/10/2021
"herniated disc"	4
"herniated discs"	0
"herniated disk"	0
"herniated disks"	0
"intervertebral disc"	22
"intervertebral discs"	8
"intervertebral disk"	4
"intervertebral disks"	1
"slipped disc"	0
"slipped discs"	0
"slipped disk"	0
"slipped disks"	0
"prolapsed disc"	0
"prolapsed discs"	2

"prolapsed disk"	0
"prolapsed disks"	0
"displaced disc"	0
"displaced discs"	0
"displaced disk"	0
"displaced disks"	0
"ruptured disc"	0
"ruptured discs"	0
"ruptured disk"	0
"ruptured disks"	0
Total retrieved	41
Total after removal of duplicates	32
Sifted for relevance	25

National Institute for Health and Care Excellence (NICE): Guidelines

<https://www.nice.org.uk/>

Searched: 5.10.21

NICE Guidance; Conditions and diseases; Musculoskeletal conditions; Low back pain 2019-2021

Guidance 1

Advice 0

Quality standards 0

Pathways 2

Total 3

Guidelines International Network (GIN). International Guidelines Library (Internet): up to 5 October 2021

<https://g-i-n.net/international-guidelines-library/>

Searched: 5.10.21

herniated disc

herniated disk

intervertebral disc

intervertebral disk

slipped disc

slipped disk

prolapsed disc

prolapsed disk

disc protrusion

displaced disc

displaced disk

ruptured disc

ruptured disk

2019-2021

0 records retrieved

ECRI Institute Guidelines Trust (Internet): up to 5 October 2021

<https://guidelines.ecri.org/>

Searched: 5.10.21

herniated disc
herniated disk
intervertebral disc
intervertebral disk
slipped disc
slipped disk
prolapsed disc
prolapsed disk
disc protrusion
displaced disc
displaced disk
ruptured disc
ruptured disk
2019-2021

1 record retrieved

Trip Database: up to 5 October 2021

<https://www.tripdatabase.com/>

Searched: 5.10.21

"herniated disc" OR "herniated discs" OR "herniated disk" OR "herniated disks" OR
"intervertebral disc" OR "intervertebral discs" OR "intervertebral disk" OR "intervertebral
disks" OR "slipped disc" OR "slipped discs" OR "slipped disk" OR "slipped disks" OR
"prolapsed disc" OR "prolapsed discs" OR "prolapsed disk" OR "prolapsed disks" OR "disc
protrusion" OR "discs protrusion" OR "disk protrusion" OR "disks protrusion" OR "displaced
disc" OR "displaced discs" OR "displaced disk" OR "displaced disks" OR "ruptured disc" OR
"ruptured discs" OR "ruptured disk" OR "ruptured disks"; in the Document; 2019, 2021

Guidelines: 81 records retrieved

Canadian Agency for Drugs and Technologies in Health (CADTH): up to 5 October 2021

<https://www.cadth.ca/>

Searched: 5.10.21

"herniated disc"
"herniated disk"
"intervertebral disc"
"intervertebral disk"
"slipped disc"
"slipped disk"
"prolapsed disc"

"prolapsed disk"

"displaced disc"

"displaced disk"

"ruptured disc"

"ruptured disk"

Advanced Search; Project Line; Health Technology Assessment; 2019-2021

0 records retrieved