

Reoperation after Degenerative Lumbar Spondylolisthesis Surgery

The favorable outcome of surgical treatment for degenerative lumbar spondylolisthesis (DS) is widely recognized, but some patients require reoperation because of complications, such as [pseudoarthrosis](#), persistent pain, infection, and progressive degenerative changes. Among these changes, [adjacent segment disease](#) (ASD) and same segmental disease (SSD) are common reasons for reoperation. However, the relative risks of the various factors and their interactions are unclear.

In a [trial](#) involving patients who underwent surgery for [degenerative lumbar spondylolisthesis](#), most of whom had symptoms for more than a year, decompression alone was noninferior to decompression with instrumented fusion over a period of 2 years. Reoperation occurred somewhat more often in the decompression-alone group than in the fusion group. (NORDSTEN-DS ClinicalTrials.gov number, NCT02051374.) ¹⁾

Single-level lumbar fusion surgery is associated with an increased rate of reoperations at the adjacent level compared with decompression only. When reoperations at the index level are included there is no difference in reoperation rates between fusion and decompression only ²⁾

The incidence of reoperation for patients with DS was 22% 8 years following surgery. Patients with a history of no neurogenic claudication and patients taking antidepressants were more likely to undergo reoperation. Outcome scores and TE were more favorable in nonreoperative patients ³⁾

The incidence of reoperation in patients surgically treated for DS was 23.2% at a mean time of 5.9 years. A significantly higher incidence of reoperation was observed in patients treated with decompression alone compared with those treated with decompression and fusion. Body mass index and disc height were identified as independent risk factors for SSD, whereas male gender and facet degeneration were identified as independent risk factors for ASD. The results of this comprehensive review will guide spine surgeons in their preoperative planning and in the surgical management of patients with DS, thereby reducing the reoperation rate ⁴⁾.

1)

Austevoll IM, Hermansen E, Fagerland MW, Storheim K, Brox JI, Solberg T, Rekeland F, Franssen E, Weber C, Brisby H, Grundnes O, Algaard KRH, Böker T, Banitalebi H, Indrekvam K, Hellum C; NORDSTEN-DS Investigators. Decompression with or without Fusion in Degenerative Lumbar Spondylolisthesis. *N Engl J Med.* 2021 Aug 5;385(6):526-538. doi: 10.1056/NEJMoa2100990. PMID: 34347953.

2)

Joelson A, Nerelius F, Holy M, Sigmundsson FG. Reoperations after decompression with or without fusion for L4-5 spinal stenosis with or without degenerative spondylolisthesis: a study of 6,532 patients in Swespine, the national Swedish spine register. *Acta Orthop.* 2021 Jun;92(3):264-268. doi:

10.1080/17453674.2021.1879505. Epub 2021 Jan 28. PMID: 33506701; PMCID: PMC8231344.

3)

Gerling MC, Leven D, Passias PG, Lafage V, Bianco K, Lee A, Morgan TS, Lurie JD, Tosteson TD, Zhao W, Spratt KF, Radcliff K, Errico TJ. Risk Factors for Reoperation in Patients Treated Surgically for Degenerative Spondylolisthesis: A Subanalysis of the 8-year Data From the SPORT Trial. *Spine (Phila Pa 1976)*. 2017 Oct 15;42(20):1559-1569. doi: 10.1097/BRS.0000000000002196. PMID: 28399551; PMCID: PMC5633486.

4)

Sato S, Yagi M, Machida M, Yasuda A, Konomi T, Miyake A, Fujiyoshi K, Kaneko S, Takemitsu M, Machida M, Yato Y, Asazuma T. Reoperation rate and risk factors of elective spinal surgery for degenerative spondylolisthesis: minimum 5-year follow-up. *Spine J*. 2015 Jul 1;15(7):1536-44. doi: 10.1016/j.spinee.2015.02.009. Epub 2015 Feb 11. PMID: 25681581.

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