# **Lumbar Laminectomy**

# **CONSENT**

This document outlines the risks and potential complication rates associated with **lumbar laminectomy** for degenerative lumbar spinal stenosis.

- **Any complication:** 10–18% for laminectomy/laminotomy, with higher rates in elderly or those with comorbidities.[1][2][3]

- **Dural tear (incidental durotomy):** 3–9%.[2][4][5][6]

- **Wound complications (infection, dehiscence, seroma):** 0.6–2%.[2][6][7]

- **Hematoma/hemorrhage:** 0.5–5.2%.[2][3][8]

- **New or worsening neurological deficit:** 1–3%.[9]

- **Direct nerve root injury:** 1–2.6%.[9]

- **Reoperation (within 2 years):** 14.9% for laminotomy, including for recurrent stenosis or adjacent level disease.[1][2]

- **Readmission (within 90 days):** 2.4%.[1]

- **Deep infection:** 0.37%.[7]

- **Wrong level surgery:** 0.74%.[5][7]

- **Death:** 0.06–0.17% (higher in elderly with comorbidities).[3]

- **Thromboembolism (DVT/PE):** 0.047–0.138%.[5]

Complication and mortality rates increase with age and comorbidities, with rates up to 18.9% and 1.4% respectively in patients over 85 with multiple comorbidities.[3] Minimally invasive and endoscopic techniques may reduce infection risk and blood loss, but have similar or slightly higher rates of dural tear and reherniation compared to open procedures.[2][4][6][8]

**Patient Acknowledgment:** By signing below, the patient acknowledges understanding of the above risks, their estimated incidence, and the potential for both common and rare complications associated with Lumbar Laminectomy. All questions have been answered to the patient's satisfaction.

**Patient Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_**

**Patient Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ DOB:\_\_\_\_\_\_\_\_\_**

# **References**

1. [Patient Outcomes After Laminotomy, Hemilaminectomy, Laminectomy and Laminectomy With Instrumented Fusion for Spinal Canal Stenosis: A Propensity Score-Based Study From the Spine Tango Registry.](https://pubmed.ncbi.nlm.nih.gov/24840246) Munting E, Röder C, Sobottke R, Dietrich D, Aghayev E. European Spine Journal : Official Publication of the European Spine Society, the European Spinal Deformity Society, and the European Section of the Cervical Spine Research Society. 2015;24(2):358-68. doi:10.1007/s00586-014-3349-0.

2. [Unilateral Laminotomy With Bilateral Spinal Canal Decompression: Systematic Review of Outcomes and Complications.](https://pubmed.ncbi.nlm.nih.gov/37990183) Algarni N, Al-Amoodi M, Marwan Y, et al. BMC Musculoskeletal Disorders. 2023;24(1):904. doi:10.1186/s12891-023-07033-1.

3. [Effects of Age and Comorbidities on Complication Rates and Adverse Outcomes After Lumbar Laminectomy in Elderly Patients.](https://pubmed.ncbi.nlm.nih.gov/18469700) Li G, Patil CG, Lad SP, et al. Spine. 2008;33(11):1250-5. doi:10.1097/BRS.0b013e3181714a44.

4. [Sciatica.](https://www.nejm.org/doi/full/10.1056/NEJMra1410151) Ropper AH, Zafonte RD. The New England Journal of Medicine. 2015;372(13):1240-8. doi:10.1056/NEJMra1410151.

5. [Incidental Durotomy After Posterior Lumbar Decompression Surgery Associated With Increased Risk for Venous Thromboembolism.](https://pubmed.ncbi.nlm.nih.gov/36727948) Gouzoulis MJ, Joo PY, Caruana DL, et al. The Journal of the American Academy of Orthopaedic Surgeons. 2023;31(8):e445-e450. doi:10.5435/JAAOS-D-22-00917.

6. [Minimally Invasive Versus Open Laminectomy for Lumbar Stenosis: A Systematic Review and Meta-Analysis.](https://pubmed.ncbi.nlm.nih.gov/26555839) Phan K, Mobbs RJ. Spine. 2016;41(2):E91-E100. doi:10.1097/BRS.0000000000001161.

7. [Risk Factors for Surgical Site Infection After Lumbar Laminectomy and/or Discectomy for Degenerative Diseases in Adults: A Prospective Multicenter Surveillance Study With Registry of 4027 Cases.](https://pubmed.ncbi.nlm.nih.gov/30325940) Ogihara S, Yamazaki T, Inanami H, et al. PloS One. 2018;13(10):e0205539. doi:10.1371/journal.pone.0205539.

8. [The Incidence of Symptomatic Postoperative Epidural Hematoma After Minimally Invasive Lumbar Decompression: A Single Institution Retrospective Review.](https://pubmed.ncbi.nlm.nih.gov/32361024) Mueller K, Altshuler M, Voyadzis JM, Sandhu FA. Clinical Neurology and Neurosurgery. 2020;195:105868. doi:10.1016/j.clineuro.2020.105868.

9. [Iatrogenic Neurologic Deficit After Lumbar Spine Surgery: A Review.](https://pubmed.ncbi.nlm.nih.gov/26386902) Ghobrial GM, Williams KA, Arnold P, Fehlings M, Harrop JS. Clinical Neurology and Neurosurgery. 2015;139:76-80. doi:10.1016/j.clineuro.2015.08.022.