

Supplementary Material 1. List of sources for FAQs about lumbar disc herniation

1 **Cleveland Clinic**

<https://my.clevelandclinic.org/health/treatments/25168-spinal-fusion>

- 1 What is spinal fusion?
 - 2 What does spinal fusion treat?
 - 3 How should I prepare for spinal fusion surgery?
 - 4 What happens on the day of your spinal fusion?
 - 5 What happens during the spinal fusion?
 - 6 How long does spinal fusion surgery take?
 - 7 What happens after spinal fusion surgery?
 - 8 What are the benefits of spinal fusion surgery?
 - 9 What are the risks or complications of spinal fusion surgery?
 - 10 What is the recovery time of spinal fusion surgery?
 - 11 When should I call my healthcare provider?
 - 12 How serious is spinal fusion surgery?
 - 13 Can you live a normal life after spinal fusion?
 - 14 How painful is a spinal fusion?
 - 15 How many years does a spinal fusion last?
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2 **Ortho Bethesda**

<https://www.orthobethesda.com/blog/spinal-fusion-surgery/>

- 1 What is spinal fusion surgery?
 - 2 What happens during spinal fusion surgery?
 - 3 Why do surgeons perform spinal fusion surgery?
 - 4 What conditions can spinal fusion surgery treat?
 - 5 What are the pros and cons of spinal fusion surgery?
 - 6 How painful is spinal fusion surgery?
 - 7 How long does it take to recover from spinal fusion surgery?
 - 8 What are the complications of spinal fusion surgery?
 - 9 Can spinal fusion make your back stiff?
 - 10 How can you cope with spinal fusion surgery?
 - 11 How can nutrition aid in recovery from spinal fusion surgery?
 - 12 What role does pain relief play post-surgery?
 - 13 What accessories might be beneficial during recovery?
 - 14 How can entertainment help during recovery?
 - 15 Why is physical therapy recommended post-surgery?
 - 16 How can emotional and physical support help in recovery?
 - 17 Can spinal fusion surgery affect the brain?
 - 18 How do opioids work for post-surgery pain relief?
 - 19 What is opioid dependence and how can it develop after surgery?
 - 20 How can someone recognize signs of opioid dependency?
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3 **Mayo Clinic**

<https://www.mayoclinic.org/tests-procedures/spinal-fusion/about/pac-20384523>

- 1 Why is spinal fusion done?
- 2 What can spinal fusion be used to address?
- 3 What are the possible complications of spinal fusion?
- 4 How should you prepare for the surgery?

- 5 What can you expect during spinal fusion?
- 6 Where might the surgeon cut to get to the bones being fused?
- 7 Where do bone grafts come from?
- 8 What might surgeons use to help hold the bones together during fusion?
- 9 What should you expect after spinal fusion?
- 10 When should you contact your doctor post-surgery?

How long does it typically take for the affected bones in your spine to heal and fuse together after spinal fusion?

- 12 What might your doctor recommend post-surgery to keep your spine aligned?
- 13 How effective is spinal fusion in fixing broken bones or reshaping the spine?
- 14 Does spinal fusion prevent future back pain?
- 15 Why might the spine need more surgery in the future after spinal fusion?
- 16 What causes much of back pain?

4 **Twin City Orthopedics**

<https://tcomn.com/wp-content/uploads/2017/10/FAQs-Lumbar-Fusion.pdf>

- 1 What does the surgery entail?
- 2 Will I need to stay overnight after surgery?
- 3 How long does the surgery take?
- 4 Are there risks involved in this surgery?
- 5 What is the follow-up protocol?
- 6 How long is the recovery after surgery?
- 7 Will I have any restrictions after surgery?
- 8 Will I need a brace after surgery?
- 9 How much pain will I have, and will I receive pain medications?
- 10 Do I need to take any other medications after surgery?
- 11 When can I start to drive after surgery?
- 12 How do I care for my surgical incision?
- 13 Do I need to do physical therapy after surgery?

5 **Rolling Hills Medical**

<https://rollinghillsmmedical.com/what-is-spinal-fusion-surgery-faq-recovery/>

- 1 What is spinal fusion surgery?
- 2 How is spinal fusion surgery performed?
- 3 What conditions are treated by spinal fusion surgery?
- 4 How common is degenerative disc disease and how does it affect the spine?
- 5 What issues can arise from a fracture in the vertebral structures?
- 6 What is scoliosis and how can fusion surgery help?
- 7 How does spinal stenosis affect the spinal canal and when might fusion be required?
- 8 What is spondylolisthesis and how does it impact the spine?
- 9 What is the success rate of spinal fusion surgery?
- 10 Is spinal fusion painful?
- 11 How long does spinal fusion surgery typically take?
- 12 What are the potential risks associated with spinal fusion surgery?
- 13 How long is the recovery time for spinal fusion surgery?
- 14 What can patients expect during the recovery process after spinal fusion surgery?

6 **Hospital for Special Surgery**

https://www.hss.edu/condition-list_spinal-fusion.asp

- 1 What is spinal fusion surgery?
- 2 What conditions does spinal fusion surgery treat?
- 3 How does spinal fusion surgery work?
- 4 How long is a hospital stay after spinal fusion?
- 5 Will I be able to drive again after spinal fusion surgery?
- 6 How long does it take to walk after spinal fusion surgery?
- 7 How long is the recovery from spinal fusion surgery?
- 8 Are there permanent restrictions after spinal fusion surgery?
- 9 What are the risks or complications of spinal fusion?
- 10 What is the success rate of spinal fusion surgery?
- 11 What are the different types of fusion surgeries?

How do ACDF Surgery, Instrumented Cervical Laminectomy, Lumbar Fusion, ALIF Surgery, PLIF Surgery, and TLIF Surgery differ from each other?

- 12 What is the Anterolateral (Side) Approach in minimally invasive lower back surgery?
 - 13 What are some frequently asked questions about lumbar disc herniations?
 - 14 Are there any success stories related to spinal fusion surgery?
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Neuromicrospine

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<https://www.neuromicrospine.com/news/answers-all-your-faqs-about-spinal-fusion-surgery>

- 1 What exactly is spinal fusion surgery?
 - 2 Why might I need spinal fusion?
 - 3 What conditions can spinal fusion surgery treat?
 - 4 What are the alternatives to surgery?
 - 5 How do I know if surgery is the right choice?
 - 6 How should I prepare for surgery?
 - 7 What happens during spinal fusion?
 - 8 Which incisions might be made for different types of spinal fusion?
 - 9 What minimally invasive techniques does NeuroMicroSpine use?
 - 10 Will I lose flexibility after spinal fusion?
 - 11 What is the recovery process like for spinal fusion?
 - 12 How long might I need to stay in the hospital post-surgery?
 - 13 What are the risks of spinal fusion?
 - 14 Will spinal fusion prevent me from having back pain again?
 - 15 How can I contact NeuroMicroSpine for more information or appointments?
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MASS General

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<https://www.massgeneral.org/assets/mgh/pdf/orthopaedics/patient-guides/spine-surgery-patient-guide.pdf>

- 1 What is the recovery time after surgery?
- 2 How long do I need to wear a bandage post-surgery?
- 3 Should I use ice or heat for my incision and swelling?
- 4 When can I shower and get the incision wet?
- 5 How long will I be on pain medicine?
- 6 What activities can I engage in after surgery?
- 7 What exercises should I do post-surgery?
- 8 Can I have sex after the surgery? If so, after how long?
- 9 When can I drive post-surgery?
- 10 When can I return to work after the surgery?

- 11 When can I travel post-surgery?
 - 12 Will my spinal implants set off airport security machines?
 - 13 How long should I take iron supplements after surgery?
 - 14 What can I do about constipation after surgery?
 - 15 Is it safe to drink alcohol post-surgery?
 - 16 Is it normal to feel depressed after surgery?
 - 17 When should I schedule my follow-up appointments with my surgeon?
 - 18 When do my sutures come out?
 - 19 Can I still have an MRI after getting a lumbar spine fusion?
 - 20 Are there alternative treatments or surgeries to lumbar spine fusion?
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9 ChatGPT-4 - most common questions about spine fusion surgery

<https://chat.openai.com/>

- 1 What is lumbar spine fusion surgery?
 - 2 Why do I need a lumbar spine fusion?
 - 3 What conditions can be treated with lumbar spine fusion?
 - 4 How is the surgery performed?
 - 5 What are the risks associated with lumbar spine fusion?
 - 6 How long is the recovery period?
 - 7 Will I have a scar?
 - 8 What kind of anesthesia will be used?
 - 9 How long will I need to stay in the hospital?
 - 10 What will my activity limitations be after the surgery?
 - 11 Will I need physical therapy post-surgery?
 - 12 How successful is lumbar spine fusion surgery?
 - 13 Will I still be able to bend and move normally after the fusion?

 - 14 What is the difference between minimally invasive and traditional open spine fusion?
 - 15 How long will the hardware (like screws or rods) stay in my back?
 - 16 Will I set off metal detectors because of the hardware?
 - 17 What are the potential complications and how common are they?
 - 18 How will this surgery affect my overall spine health in the long term?
 - 19 Can I still have an MRI after getting a lumbar spine fusion?
 - 20 Are there alternative treatments or surgeries to lumbar spine fusion?
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10 Mika et al. Assessing ChatGPT Responses to Common Patient Questions Regarding Total Hip Arthroplasty - adapted to spine fusion

[Assessing ChatGPT Responses to Common Patient Questions Rega... : JBJS \(lww.com\)](#)

- 1 When should I get spine fusion surgery?
- 2 How long does spine fusion surgery take?
- 3 Which approach is better for spine fusion surgery?
- 4 Is outpatient spine fusion surgery safe?
- 5 What are the risks of spine fusion surgery?
- 6 How common is infection after spine fusion surgery?
- 7 How common are complications like failed fusion or hardware malfunction after spine fusion surgery?
- 8 What is the success rate of spine fusion surgery?

- 9 How long does recovery take after spine fusion surgery, and how long will I be out of work?

10 What limitations will I have after spine fusion surgery? Can I do any activity I want?