

What injured workers should know about lumbar fusion surgery as a treatment for degenerative disc disease

This information sheet is for injured workers with a Minnesota workers' compensation claim who are considering lumbar fusion surgery. It does not provide medical advice. Whether lumbar fusion is right for you is a choice you must make with your doctor.

What is lumbar fusion surgery?

Lumbar fusion surgery is performed as treatment for a number of different conditions that affect the structural integrity of the spine (for example, certain spinal fractures). Lumbar fusion surgery is also sometimes performed for treatment of severe chronic low back pain in patients with degeneration of one or more lumbar discs.

What are the results of lumbar fusion for injured workers with chronic low back pain and degenerative disc disease?

You might want to consider and discuss the following information¹ with your physician before making a decision about whether you will proceed with surgery.

- Studies of injured workers show about half of them get better after the surgery. However, up to one-third of patients report a “poor” result.
- In some studies, when lumbar fusion is compared to other treatments, patients who receive a fusion do better than those who just continue to get the same treatment they were already receiving. However, in other studies, patients who were referred for intensive medical management and interdisciplinary rehabilitation did as well as those who had fusion surgery.
- Ten to 20 percent of patients develop complications from the surgery. Complications include infection, deep vein thrombosis, pulmonary embolism, nerve injuries and problems with bone grafts or implanted devices.
- About one in every four injured workers who have a lumbar fusion will have another lumbar surgery. Subsequent surgeries are often done because the fusion doesn't “take” (become solid) or the hardware used in the fusion becomes a problem; or, because the spine above or below the fusion starts to deteriorate, causing more pain and disability.
- Most injured workers who are disabled by their back pain remain disabled after their fusion surgery, with fewer than 50 percent returning to work.
- Most injured workers continue to use strong pain medication after their surgery; some even require more medication.

Can I get a second opinion?

The workers' compensation law allows you to get a second opinion from a provider of your choice, paid for by the workers' compensation insurer.

What does workers' compensation law allow?

Lumbar fusion surgery is allowed by Minnesota's workers' compensation treatment rules for patients with incapacitating low back pain that has persisted for more than three months and who have degenerative disc disease and positive discogram at one or two spinal levels. These rules require that your surgeon notify the workers' compensation insurer of a proposed lumbar fusion surgery at least seven days before surgery, except in cases of emergency. Within seven working days after receiving notice from your surgeon the insurer must either: 1) approve or deny the surgery; 2) request additional information from your doctor; 3) request that you get a second opinion; or 4) arrange an examination by a doctor of the insurer's choice.

What do medical organizations say about lumbar fusion?

Several medical societies have done thorough reviews of the scientific studies on lumbar fusion.²

- The American Pain Society in 2009 recommended that “... *shared decision-making regarding surgery for nonspecific low back pain include a specific discussion about intensive interdisciplinary rehabilitation as a similarly effective option, the small to moderate average benefit from surgery versus non-interdisciplinary nonsurgical therapy, and the fact that the majority of such patients who undergo surgery do not experience an optimal outcome (defined as minimum or no pain, discontinuation of or occasional pain medication use, and return of high-level function).*”
- The International Society for the Advancement of Spine Surgery in 2007 recommended that fusion surgery is only indicated for patients with chronic low back pain and degenerative disc disease if: “... *The patient has not shown sufficient improvement from a minimum of 6 consecutive months of structured conservative medical management (including at least pain medication, activity modification, and daily exercise), with adequate patient compliance.*” And, “*The patient has then subsequently not shown sufficient improvement from a program of intensive multidisciplinary rehabilitation ...*”
- The American Association of Neurological Surgeons in 2005 concluded that “*Lumbar fusion is recommended as a treatment for carefully selected patients with disabling low back pain due to one- or two-level degenerative disease without stenosis or spondylolisthesis ... An intensive course of physical therapy and cognitive therapy is recommended as a treatment option for patients with low-back pain in whom conventional medical management has failed.*”

What treatment is available if I decide not to have lumbar fusion?

Minnesota's workers' compensation treatment rules allow for a variety of treatment options including: intensive physical rehabilitation, chronic pain management, ongoing medication, work conditioning/work hardening programs and health club memberships. You and your doctor should discuss whether any of these or other treatment options would be helpful.

¹ Franklin GM, et al “Outcome of lumbar fusion surgery in Washington state workers' compensation” Spine 1994; 19(17): 1897-903

DeBerard MS, et al “Outcomes of posterolateral fusion in Utah patients receiving workers' compensation” Spine 2001; 26(7): 738-46

Hodges SD, et al “Predicting factors of successful recovery from lumbar spine surgery among workers' compensation patients” J Am Osteopath Assoc 2001; 101(2): 78-83

Maghout-Juratli S, et al “Lumbar fusion outcomes in Washington State” Spine 2006; 31: 2715-2723

Nguyen TH, et al “Long-term outcomes of lumbar fusion among workers' compensation subjects” Spine 2011; 36(4):320-331

² Chou R, et al “Interventional Therapies, Surgery, and Interdisciplinary Rehabilitation for Low Back Pain. An Evidence-Based Clinical Practice Guideline From the American Pain Society” Spine 2009; 34:1066-1077

International Society for the Advancement of Spine Surgery Policy Statement on Lumbar Spinal Fusion Surgery http://www.isass.org/public_policy/2011-07-15_policy_statement_lumbar_surgery.html

Resnick DK, et al “Guidelines for the performance of fusion procedures for degenerative disease of the lumbar spine. Part 7: intractable low-back pain without stenosis or spondylolisthesis” J Neurosurg: Spine 2005; 2:670-672