

Don't Withhold Spinal Fusion Because of Age

If you were 80 years old (or older) and had chronic low back pain, would you consider a spinal fusion? What if you knew you would live another 10 years, 15 years, or even longer? More octogenarians (80 years old and older) are making that decision. And with the new minimally invasive surgeries, the option of a simple spinal fusion to stop the pain may be available for more seniors than ever before.

The first question that comes up when thinking about spinal fusion surgery in this age group is: safety. No matter how the procedure is done, there are some risks. But with improved surgical techniques, better surgical tools, and more advanced imaging available during the procedure, the risk of complications and problems has declined.

In this study, surgeons from Spine Midwest, Inc. in Jefferson City, Missouri performed a lumbar fusion on 40 patients 80 years old or older. Half the group had an open incision procedure. The other half was operated on using a minimally invasive approach. Minimally invasive means a smaller incision is made. Using a special retractor system, the muscles and soft tissues can be pulled aside instead of cutting away from the spine.

Many studies have shown that the minimally invasive approach reduces bleeding, length of stay in the hospital, and postoperative pain. The results of this study confirmed those findings and more. Just like younger patients, the older adults in this study benefitted from a surgical approach called the extreme lateral interbody fusion (XLIF).

With an XLIF, the surgeon passes surgical instruments to the spine from the side rather than from the back of the spine. By doing so, it is possible to avoid hitting blood vessels and nerve tissue that can result in serious complications. The XLIF has been compared with the more traditional approach to lumbar fusion (called posterior interbody lumbar fusion or PLIF). This may be the first study to compare them in octogenarians.

Most of the patients in the study (25) had a single-level lumbar fusion. But there were some (seven) who had two-levels fused, and eight others who had a three-level lumbar fusion. The risk of blood loss and need for transfusion increases with multi-level fusions. Any complication increases the risk that the patient won't be able to go directly from the hospital to home.

And in this study, hospital stay was four days shorter for the minimally invasive group. Not only that, but only three of the patients who had the minimally invasive approach were sent to skilled nursing facilities. Those who had the open posterior lumbar interbody fusion (PLIF) were all discharged to the skilled nursing facility for further care and rehab. They were unable to return home.

The PLIF group had more serious complications such as infection, poor wound healing, and bone fracture. Even the number of deaths in the first six months after surgery was higher in the open PLIF group (six deaths in the PLIF group compared with only one in the minimally invasive group). Infection and blood loss were the reasons most patients died.

The surgeons also found that with the minimally invasive extreme lateral approach to fusion, they could insert a larger implant into the disc space compared with the posterior approach. A larger implant helps maintain the proper disc height between two vertebrae and improves spinal alignment. And with larger implants and greater stability, they could reduce what might have been a multi-level fusion down to only one-level.

The authors conclude if you are an older adult with disabling, degenerative back and/or leg pain, don't give up. Your function and quality of life matter -- maybe even more now than ever before! The results of this study suggest you could be a candidate for a procedure like the minimally invasive lumbar spinal fusion. Talk to your doctor today about your options, including the risks and benefits of minimally invasive surgery.

Reference: William Blake Rodgers, MD, et al. Lumbar Fusion in Octogenarians. In Spine. Supplement to December 15, 2010. Vol. 35. No. 26S. Pp. S355-S360.