

How Long Can You Wait to Have That Spinal Fusion Surgery Before

Physical Therapy in Port Townsend for Lower Back

Can you wait too long to have spinal fusion surgery? Some research has shown that waiting too long may mean a poor pain relief hoped for. But how long is too long? That's the focus of this study from Great Britain.

Most people recover from back pain with a little time and attention. Those who don't are often treated with medication or antiinflammatories. Some seek the help of a chiropractor, Physical Therapist, acupuncturist, or massage therapist. If that doesn't work after three months, the condition is becoming chronic.

Disc degeneration is a common cause of chronic low back pain. The pain can become so constant and intense that surgery on the spine at that level becomes the next step in treatment. To find out if waiting more than six months would have an effect, the authors followed a group of 209 patients for a minimum of two years. Most of the patients had painful symptoms for as long as 28 years!

Data was collected before and after surgery using a variety of tests and measures. X-rays were used to look for evidence of a successful fusion. Patients filled out several different surveys with questions about pain, function, disability, attitude, anxiety, and depression. These were repeated at regular intervals (first at six weeks, three months, and six months after surgery; then every year thereafter).

The authors found that everyone got better -- even the patients who had chronic pain for years and years. And the improvement was long lasting. Despite the common belief that waiting too long means surgery won't help, there aren't many studies to support or dispute this. This is the first one to really address the issue.

The idea that chronic pain can't be changed with surgery comes from the belief that over time pain messages get so embedded in the nervous system (spinal cord and brain) they can't be turned off. Scientists refer to this as a central pacemaker. The pacemaker sends continuous pain messages from the nerves to the spinal cord and then up to the brain. The result is called central sensitization.

But this belief that a long period of pain leads to a poor prognosis wasn't supported by the results of this study at least. Factors like mental health (depression, anxiety) and general health (presence of other diseases or conditions) didn't change. These patients got better after surgery.

Did they just beat the odds or was this an outcome that can be repeated? Since patients were still reporting positive results (pain relief and function) up to five years later, it looks like the results are real and long lasting. The authors of the study do point out that they were careful to select patients with just one pain diagnosis. No one in the study had other causes of chronic pain like fibromyalgia.

The particular approach used in the spinal fusions for all of these patients was one called posterior lumbar interbody fusion (PLIF) done from the back of the spine. An open incision was made, the disc removed, and the bone on either side of the disc was taken away. The bone taken out was ground up and used to pack the middle of the disc space before inserting a device called a cage on either side of the bone chips. Then a plate and screws were used to hold everything together until bone filled in to complete the fusion.

The authors conclude that at least for patients with disc degeneration, a posterior lumbar interbody fusion (PLIF) works. Even if symptoms have been present for a very long time. Chronic and severe pain is not a reason to avoid spinal fusion using PLIF. This brings the theory of centralization of pain into question. Future studies are needed to further investigate these new findings.

Reference: Laurence A. G. Marshman, MD, FRCSN, et al. Does Symptom Duration Correlate Negatively with Outcome of Posterior Lumbar Interbody Fusion for Chronic Low Back Pain? In *Spine*. March 2010. Vol. 35. No. 6. Pp. 657-665.

