

# More Pain than Gain: Pitfalls of Spinal Fusion Highlight Importance of Prevention

Yet another reason to hit your yoga mat to prevent chronic back pain issues! A new epidemiological study indicates that spinal fusion, a common surgical procedure for back pain, puts patients at a 29% greater risk of developing adjacent segment degeneration (ASD), a debilitating spinal condition that causes even more pain.

Millions of people suffer from back pain, and seeking relief, rush to their doctors. For the most part, however, doctors have little to offer than painkillers and surgery for more severe cases.

Now a new study indicates that one of the most common surgical procedures designed to relieve back pain, spinal fusion, puts patients at a 29% greater risk of developing a degenerative spinal condition that brings even more pain. The study highlights the importance of exploring alternative approaches, such as [yoga, as therapy for chronic back pain](#).

Conducted by researchers in Nantong, China, and published in the April issue of the prestigious medical journal *Spine*, the study examined medical records of 35,000 back-pain patients, who had undergone surgery involving spinal fusion. They found that almost a third of all these patients developed what is called ASD, or adjacent segment degeneration. This is a long-term degenerative condition of the spine, affecting the intervertebral joints above and below the area addressed by the surgery.

The adjacent segment degeneration (ASD) is likely caused by extra wear and tear resulting from the spinal fusion. In spinal fusion, surgeons use supplementary bone tissue to immobilize the area and ameliorate the pain, but after the procedure, it is not possible for patients to move the fused vertebrae. Precisely at the place where the procedure was done, it becomes next to impossible to bend forward, arch back, twist or tilt the spine. This inevitably forces the joints around the surgery site to work extra hard to compensate for the lack of movement in the spine. Those joints have to work each time you sit, stand, walk, reach, lift and more. It is this extra wear and tear that causes ASD in almost one out of three people undergoing spinal fusion.

The study highlights the importance of emphasizing alternatives to surgery, such as yoga, as therapy for chronic back pain. Yoga helps release the chronic muscle tightness that lies at the root of much back pain and counteracts faulty muscular holding patterns. A mounting body of studies has shown yoga to be effective for back pain. Most recently a review of studies on the [effects of yoga for back pain](#) found consistent improvements across the ten high-quality studies reviewed.

As always, however, prevention is better than cure. Studies on yoga for back pain cannot gauge the considerable preventive effects from a regular yoga practice. By keeping the

muscles strong and flexible, facilitating proper posture, and creating greater awareness of the body's inherent signals of discomfort and overuse, yoga's preventive effects for back pain are likely to far exceed the effects picked up by studies on chronic back pain sufferers.

Source: Xia, Xiao-Peng MD; Chen, Hong-Lin MM; Cheng, Hong-Bin MM. (2013).  
Prevalence of Adjacent Segment Degeneration After Spine Surgery: A Systematic Review  
and Meta-analysis. *Spine*: 01 April 2013 - Volume 38 - Issue 7 - p 597–608.