

SpineFAQs

X-Stop

Spinal stenosis is a degenerative problem of the lower spine. As the spine ages, the joints enlarge, and the ligaments holding the bones together thicken or buckle. This can lead to narrowing (stenosis) in the spine, which in turn can cause symptoms. These symptoms can include lower back pain, pain that radiates around the buttocks, and pain/numbness/tingling down the legs. Usually the nerve symptoms are worse when standing or walking. They tend to get better with bending forward (such as leaning on a shopping cart) or with sitting down.

Traditionally, if a patient did not respond to non-surgical treatment, surgery was warranted. This typically involves lumbar laminectomy (removal of some bone to take the pressure off of the nerves) and possibly fusion (where the bones are fixed together). Surgery has been very effective in the treatment of spinal stenosis, but there is a fairly long recovery time, and risks of injury to the nerves and scar tissue exist.



What is X-Stop?

The X-Stop procedure is a minimally invasive alternative to laminectomy and fusion in some patients with stenosis. Basically the X-Stop is a small metal device that is wedged between the bones of the back called the spinous process. This keeps that area from narrowing down on the nerves when the patient stands and walks. It has been used in Europe for years, and was recently introduced in the U.S.



Who is a candidate for the X-Stop?

Not everyone with stenosis can be treated with the X-Stop. If you have many levels of stenosis (more than two), have scoliosis (curvature of the spine), have osteoporosis, have what is known as a spondylolysis (a fracture in a certain part of the vertebra bone), have already had a laminectomy at the level of stenosis, have an allergy to titanium metal, or have an active infection, you are NOT a candidate for the X-Stop. In addition, the X-Stop

seems to work only in those patients whose symptoms are made worse with standing/walking, and go away with sitting or bending forward.

How well does the X-Stop work?

Since the X-Stop is a new technology, we don't know how well it works in the long term. The studies available show that at two years, the X-Stop provides good symptom relief in 65-70% of patients. We are still determining the long term outcomes.

Tell me about the procedure?

X-Stop is an outpatient procedure. While some surgeons do this under local anesthesia (numbing medicine), I think it is safer to use general anesthesia. You are brought to the operating room, placed under general anesthesia (put to sleep) and positioned on your belly. A small incision is made on your back at the area of stenosis, and the muscle is retracted. Using a special video x-ray machine, the implant is placed between the spinous processes, opening up the spaces for the nerves. The tissues and skin are then closed and you are awakened. It takes about 30 minutes to do.

What are the risks of X-Stop?

As with any surgery, infection, wound healing problems, pain and anesthesia are all possible risks. With regards to the X-Stop procedure, it is possible to fracture the spinous process bones, the implant can get displaced, there is a remote possibility of nerve damage or leakage of spinal fluid. I think the biggest unknown is how much better you might get. The nice feature to the X-Stop procedure is that it is reversible (it can be taken out), and a more traditional laminectomy/fusion procedure can be performed.

How do you know if I am a candidate?

I will be able to tell by getting x-rays, an MRI (or Myelogram), and by learning about what your symptom pattern is and by understanding what treatments you have already had.