X-STOP[®] Allows Machinist to Fulfill His Retirement Dream

One morning back in December 2004 when 58-year-old Mark Casale tried to get out of bed, he fell to the floor. For an entire year afterward, the man who once routinely hiked 6-7 miles a day in the hills above his Southern California home could not walk a step.



"It scared the heck out of me," he recalled. "I couldn't get up out of bed. I gained 25 pounds, which I still need to lose. I was very depressed. I couldn't work at my job as a machinist at Lockheed Martin or do anything."

His primary care physician first thought Mark was suffering from peripheral

arterial damage caused by his diabetes. But an MRI detected that Mark's inability to walk due to severe pain from his buttocks all the way to his feet was caused by lumbar spinal stenosis (LSS) in his L3 and L4 vertebrae.

What is Lumbar Spinal Stenosis (LSS)?



LSS is a narrowing of the spinal canal that impinges on the nerves in the spinal canal or on the nerves exiting to the legs. This can lead to persistent pain in the buttocks, limping, lack of feeling in lower extremities and decreased physical activity. LSS is the largest indication for back surgery in people over 50, who make up the fastest growing demographic

population in the world. It is estimated that 1.2 million people in the United States alone suffer from LSS, with over 200,000 diagnosed patients admitted to U.S. hospitals annually.

Patients who are diagnosed with LSS initially receive conservative treatment such as bed rest, support devices, physical therapy and pain medications before moving on to surgical remedies. Initially, conservative treatment allowed Mark to walk short distances and return to work.

Discovering an Option to Major Surgery

After three years of conservative treatment, Mark was fed up with his inability to walk more than six minutes without feeling severe pain. He was in constant pain at his job, where he stood most of the time.

Mark refused to consider major back surgery such as a laminectomy because he feared at his age he would never heal completely from the procedure where bone is removed. He was losing hope that anything could be done for his pain. Then his general practitioner suggested that he talk to surgeons at the University of California, Los Angeles. There he met orthopaedic surgeon Dr. Arya Nick Shamie and learned of a new, minimally invasive surgical procedure with Kyphon's X-STOP[®] Interspinous Process Decompression System.

"Mark was the perfect candidate for this surgery since his pain went away when he sat down or flexed forward and came back when he stood up or started walking," said Dr. Shamie. "The X-STOP spacer puts the patient's spine in a seated position even when standing up."



Mark was impressed with Dr. Shamie's knowledge of the procedure and felt confident knowing that he was renowned for his expertise with the X-STOP spacer. Since being trained on the procedure in 2005, Dr. Shamie has performed approximately 80 surgeries.



On November 19, 2007, Mark was implanted with an X-STOP spacer, which increased the area of the spinal canal and relieved the pain caused by his LSS. He was under local anesthesia and the entire procedure took about an hour. "Dr. Shamie told me that I would probably need to stay in the hospital for one day, but 30 minutes after the surgery I was up and walking with no pain, so I went home that day," Mark said. "My symptoms were reduced instantly. Even now, I have no pain in my lower legs or buttocks. It is perfect. I would have done this sooner if I had known about it."

Looking Forward to Pain Free Life

Mark is looking forward now to retiring next year and working part-time as an aircraft mechanic. This retirement dream, he said, is something he couldn't have realized without the X-STOP procedure. He is getting back in shape by walking every day with his dog in the hills above his Southern California home.

"My dog really missed that. Before my surgery, I hadn't walked with her in $2^{1/2}$ years," Mark said.

