

# Pioneers in Spine Surgery Announce Two New Breakthroughs

Pain caused by problems in the spine is among the most common and debilitating health concerns in the U.S. Two new procedures are being pioneered by the staff of St. Mary's Spine Center, revolutionizing the treatment of disabling spine conditions.

## If You Have to Sit to Relieve Leg Pain, Outpatient Treatment May Help

Lumbar spinal stenosis or neurogenic claudication is a very common problem, especially among older adults. As enlarged spine joints trap nearby nerves, patients experience pain, numbness, weakness and other symptoms in the back and down the legs after walking or standing for a time. Discomfort subsides when patients sit, lie down or keep their spine flexed forward. Until recently, open spine surgery has been the only treatment available when nonoperative measures failed to bring adequate relief.

Seven years ago, James Zucherman, M.D. and Ken Hsu, M.D. invented a minimally invasive treatment for lumbar spinal stenosis called X STOP. "This treatment is a significant breakthrough because we do not remove any bone or soft tissue. More patients

can be considered as candidates because X STOP can be performed on an outpatient basis, with the patient under local anesthesia," explains Dr. Hsu. "Through a small incision we place the small titanium implant between two spinous process bones in the spine, keeping the spine slightly flexed and removing pressure from the nerves. Surgery time is short, patients recover more quickly and can resume normal activities."

Dr. Hsu points out that X STOP has also been found to be effective in treatment of back pain in active adults. "Younger patients who could hardly walk one or two blocks are back to walking, swimming, surfing and hang gliding," he says.

## Artificial Disks Give Hope to Younger Back Pain Sufferers

St. Mary's Spine Center is one of the few selected centers in the nation studying total disc replacement, an alternative to spinal fusion surgery. Now in FDA multicenter clinical trials, this artificial disc is being used to replace painful, diseased discs in the lower spine. Drs. Zucherman and Hsu have been using disc replacement since 2001 with excellent results.

Total disc replacement effectively treats conditions such as degenerative disc disease. "We have been able to achieve very good outcomes," explains Dr. Zucherman. "The operation is performed through smaller incisions compared to fusion, so postoperative discomfort is minimized and recovery times are faster."

Men and women between 20 and 60 who need to have one or two adjacent vertebrae stabilized may be candidates.



James Zucherman, M.D. holds an X STOP titanium implant that allows patients to resume normal posture.

A disc replacement device to treat the cervical (neck) spine will soon be available.

## St. Mary's Leads the Way

St. Mary's leadership in these new technologies is not surprising. The medical center has been a pioneer in the area of spinal fixation and minimally invasive approaches since the 1970s. It was the first in the U.S. to perform laparoscopic lumbar spine fusions and percutaneous cervical diskectomies.



Ken Hsu, M.D. (above) and James Zucherman, M.D. are unusual in their field because they both have similar training in internal medicine, general surgery, orthopedic surgery and spine surgery, but never met until 1979 in San Francisco.

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*St. Mary's Spine Center, a multi-disciplinary spine program, coordinates all aspects of spine care including state-of-the-art diagnostics, nonsurgical interventions, physical therapy and advanced surgical techniques. For further information, phone 415-750-5849 or visit [www.stmarysmedicalcenter.org](http://www.stmarysmedicalcenter.org).*