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Dr. Steven Kirshner, a Lambertton orthopedic surgeon, explains an X-ray showing where the Charite Artificial Disk (left) was implanted in a patient's spine.



An alternative to spinal fusion



Implantation of artificial disks gives patients another option

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Barbara Szychowski is an unwriting pioneer. The Southampton woman was in a lot of pain when she sought medical help for a spinal disk that was almost completely gone. A herniated disk had degenerated, and she was having trouble just getting around. Simply getting out of bed and walking had become every-day issues.

"I've had back problems since 1985 from a car accident," she said. "It seemed like every day it was worse."

Although she had talked about fusing pieces of her spine together, Szychowski said she was concerned about how that traditional treatment would affect her mobility afterward. Instead, she saw an innovative solution on television and was inspired to try a procedure that was just becoming available. Two months ago, she became one of the first people in the area to have an artificial disk inserted in her spine.

According to a spokeswoman at Virtus Health, the Charite Artificial Disk is the first such device for spinal disks that has been approved by the federal Food & Drug Administration. The disk is comprised of two metal end plates and a movable plastic center, and is reminiscent of those used in hip or knee replacements. The device helps the spine align and allows it to move with the flexibility to bend and twist.

Szychowski sought medical help from Dr. Steven Kirshner, an orthopedic surgeon with offices in Lambertton, who is certified to per-

form spinal disk replacement surgery.

"Typically, patients would be treated by spinal fusion, which puts stress on the remaining spine," said Kirshner, adding that fusion surgery limits motion. "Inserting the artificial disk will allow patients to have much more flexibility in the joint and decrease the stress on the remainder of the spine."

With a spinal fusion, damaged disks are removed and vertebrae are joined together by bone grafts or metal screws. Afterward, patients typically wear a brace for about three months and do not return to work for approximately 16 weeks. There is no large motion in the area of the spine that was fused.

According to Virtus Health, clinical trials for the artificial disk replacement surgery allowed patients to maintain their flexibility. The trial patients experienced less pain, left the hospital sooner than their fusion surgery counterparts and usually returned to work after 12 weeks. "With this, you're walking around right away," said Kirshner. "It's an normal motion, but close to it."

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Barbara Szychowski
artificial disk recipient



The clinical trial also revealed that patients were more satisfied with the new technology than those who had no treatment or treatment.

In order to implant an artificial disk, the spine must work through the natural process of damaging the spinal root. Although there is a risk of infection, as with any implant, Kirshner said complications are limited.

Not every patient considering spinal fusion is a candidate for artificial disk replacement surgery. Kirshner said people with weak bones, such as older patients, and those with osteoporosis would not be eligible because the device could not remain inserted properly. However, he said he expects artificial spinal disks to replace one-third of fusion-based surgery. "It's really opening a whole new quality of life," he said.

Szychowski said her recovery from the disk surgery has been "better than expected." After a week of rest, walking and mild pain, she returned to work quicker than a normal one would have allowed. "There are no limitations and better," she said.



ECT staff photographer DANIEL
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