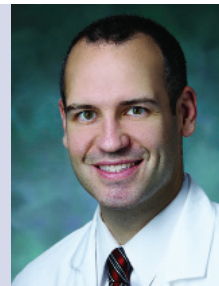


# Less is More

for patients who  
need spine surgery

Image of a patient's  
spine after minimally  
invasive surgery.

Daniel Sciubba, M.D.  
*Neurosurgeon*



**M**inimally invasive has been a buzzword in the medical community for years. But what does the term really mean, especially if you are looking into options for surgery in an area as complex as the spine?

“Minimally invasive surgery isn’t just about the size of the incision. That’s only the tip of the iceberg,” explains Johns Hopkins neurosurgeon Daniel Sciubba, M.D. “What we really want to focus on is doing minimal damage to the normal tissue surrounding the root of the problem—whether it’s a tumor, arthritis, a fracture or nerve compression.”

In classic procedures, surgeons cut a large incision and open up a person’s tissues to get to the affected area. This approach, while effective at treating the problem, can cause scar formation, expose the next area of the spine to further damage and lead to wound-healing issues.

“In this day and age, we have the technology to navigate the spine with precision. This allows us to do less collateral damage and improve the outcomes of surgery,” Dr. Sciubba says. “If I can do something smaller and less invasive, I want to offer it to my patients.”

## A Variety of Options

This new technology has led to a greater variety of minimally invasive options for the treatment of spine problems. For example, Dr. Sciubba uses tubular retractors to perform microdiscectomies through one-inch incisions. He can fix fractures by inserting screws with incisions of only one centimeter. He also treats spinal compression with a “transpoas approach,” which means he can

enter the body from the side to get to the affected area more efficiently. As a result of these and other advances, patients like William Bechtold and Gerry Paradiso are reaping the benefits.

Bechtold, a 72-year-old retired physicist and engineer, came to Dr. Sciubba with lumbar stenosis, a degenerative condition in the lower spine that causes nerve compression and, in turn, leg pain. An avid golfer, Bechtold had to give up his favorite hobby when the pain became too severe.

“It was getting to the point where I was in constant pain,” he recalls. “I even tried epidural shots, but they didn’t work. It was like trying to paint a used car—it wasn’t fixing the real problem.”

After his consult with Dr. Sciubba, Bechtold was relieved that he could avoid a spinal fusion and instead be treated with a minimally invasive procedure called interspinous distraction. Using the latest instruments for surgery in the lumbar spine, Dr. Sciubba was able to decompress, as well as stabilize, Bechtold's spine—a combination of outcomes that usually can only be achieved with a much larger conventional spinal fusion operation. The interspinous distraction takes only about an hour and requires very small incisions. Most patients feel immediate relief of their leg pain and stay in the hospital only one or two days, as compared to five or six days following the traditional fusion operation.

Now, a month after his surgery, Bechtold is healing well and taking regular walks. He hopes to play golf again when he has fully recovered.

### Expertise for Complex Cases

With training in neurosurgery, oncology and orthopedic surgery, Dr. Sciubba also offers expertise in the treatment of more complex cases. Gerry Paradiso, age 47, sought this expertise after collapsing in his home from intense back pain.

## Back and Neck Pain

For people who have been diagnosed with degenerative disc conditions and are tired of suffering from back and neck pain

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He was diagnosed with a tumor on his spine caused by the spread of prostate cancer.

Traditionally, these are surgeries that require at least a foot-long incision. In many cases, patients may not get their strength back. To achieve better outcomes, Dr. Sciubba took a

### Advantages of Minimally Invasive Surgery

- Smaller incisions
- Lower infection rates
- Fewer wound complications
- Faster recovery time

groundbreaking, minimally invasive approach. Using only two, two-inch incisions, he inserted tubular retractors to remove the tumor and decompress the spine. Then he performed a percutaneous spinal fusion, using X-ray guidance to put screws through the skin in two, one-centimeter incisions.

This procedure resulted in one-tenth of the blood loss of the traditional method. In addition, Paradiso was moving his legs the next day and walking a few weeks later. "Most important, he was able to receive radiation treatment for his cancer only a couple weeks after surgery, which is unheard of with the open approach. Typically, patients must wait several weeks longer before they are strong enough to receive radiation treatment," Dr. Sciubba says.

"I think he saved my life and believe he was brought to heal me," adds Paradiso. "The surgery was life-altering. I wasn't supposed to get any movement back in my legs. While I am still being treated for my cancer, I am now able to walk with a walker and control my bodily functions. That really increases the quality of life. Let me tell you, he's got magic hands."

### You may NOT be a good candidate for minimally invasive surgery if you:

- have excessive scarring from a previous surgery
- have severe osteoporosis, making the bones difficult to see on an X-ray

—Kim Fabian



Patient Nancy Baron with Dr. Olivio.

### Neurosurgery Advances Patient Care

In our last issue, we reported on the new iCT scanner available to surgical patients at Johns Hopkins Bayview. The iCT is especially useful to those who are having procedures of the brain and spine. This past December, Nancy Baron was the first patient to benefit from the cutting-edge technology. She presented a complex case—a tumor at the base of her skull, near her brain and an artery.

"When my neurologist said it was a tumor, I was devastated," she confides. "Where the tumor was located, I wasn't sure I was going to come out of the surgery."

Baron's doctor said he was going to find her the best neurosurgeon for this type of work. He recommended Alessandro Olivi, M.D., at Johns Hopkins Bayview. Looking for every possible advantage, Baron was glad to hear that the hospital had just invested in the iCT, which allowed her surgery to be performed in the most precise, accurate and safest fashion. "I knew God was blessing me when Dr. Olivi mentioned the new technology. I didn't care if I was the first patient or the 999th patient to use it. I just wanted anything that would increase my chances."

During the surgery, doctors were able to remove all of her tumor. And only an hour after the procedure, Baron had 90 percent of her reflexes back. Now, several months later, she continues to recover nicely.

"I was given the best possible scenario for a successful surgery," she says. "This was a worst-case situation, and look how well it turned out. It's just amazing."

To see a video about Baron's experience and learn more about the iCT, visit [hopkinsbayview.org/neurosurgery/iCT/benefits.html](http://hopkinsbayview.org/neurosurgery/iCT/benefits.html).

For more information about minimally invasive spine surgery, call 410-550-0939.