The Guiding Principle at the Spine Center: Superior Outcomes

Kevin Yao, MD
Neurological Surgery

The Spine Center at Englewood Health blends the latest advancements in medical technology with professional expertise and a holistic approach to musculoskeletal care to produce the best possible outcomes for patients. The center has the staff, equipment and capabilities to handle anything from minor complaints to the most complex spinal deformities, including staged procedures for complete spinal reconstruction in patients with congenital spinal deformities.

"We're always working closely with pain management doctors, physiatrists and physical therapists to make sure we produce the best possible clinical outcomes with the least aggressive modalities," said Kevin Yao, MD, a neurological surgeon at Englewood Health, who has extensive expertise in various complex brain and spine surgeries.

To guide their decision making, Dr. Yao and the surgeons at the spine center will analyze the latest research and best practices to decide whether minimally invasive surgery or traditional open surgery will produce the best outcomes.

"We favor the less invasive approach whenever possible," Dr. Yao said. "We'll perform the minimally invasive surgery if we think the outcomes will be better than open surgery."

However, minimally invasive surgery options may not always be better than traditional open surgery. Dr. Yao noted that research has found that the longterm results of lumbar decompression and fusion surgery may not necessarily favor minimally invasive surgery over open surgery.

"Minimally invasive surgeries deliver less blood loss, less recovery time, and less pain in the short term, but, a year or two down the line, it's unclear whether minimally invasive fusions work as well as traditional fusions. And if a fusion doesn't heal appropriately in the medium to long term, patients often need additional spine surgery to correct this," he said. "We make it a policy to perform the surgery that will have the better overall long-term outcomes."

The spine center team is meticulous about every aspect of surgery, which has led them to incorporate specific technology for surgeries to minimize blood loss. Embracing a multimodal blood conservation strategy that combines fluid and temperature management, electrocautery and intraoperative blood salvage has improved patient results.

"We're attuned to the reprocessing of blood since it has a beneficial effect on many aspects of outcomes, including shorter hospital stays, faster recovery times, and avoiding post-surgery anemia," Dr. Yao said.

While the spinal center embraces technological advances, Dr. Yao stressed that the team will only incorporate them into practice if the new devices and techniques produce superior outcomes.

One recent advancement that has made its way into the spinal center's tool kit is the latest disc arthroplasty devices. These artificial disc devices function more similarly to a native disc as compared to fusion devices, and may provide better long-term spine health.

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"It has built-in flexibility that provides more mobility than a traditional fusion," Dr. Yao said. Traditional spinal fusions create forces within the spine that put additional stress on the discs above and below the fusion. That added strain incrementally increases the likelihood of future disc disease.

The replacement disc, on the other hand, improves mobility in the short term, and theoretically minimizes the stress on the adjacent discs, thereby decreasing the risk of degeneration of those discs.

While discs commonly break down over time, it is difficult to identify exactly which disc is causing pain and requires replacement.

"When you're looking to do the least amount of medical intervention to produce the best result, you need to find the exact source of the symptoms," Dr. Yao said. "That's a tricky balance and where the art of decision making in spine surgery comes into play. We base those judgments on experience and the collective wisdom of our team."

The Spine Center's expertise has been honored by receiving The Joint Commission's Gold Seal of Approval® for Spinal Fusion.

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