Regional Center of Medical Excellence

Rockford Spine Center Surgeons Advance the Field of their Specialty



Drs. Michael Roh, Fred Sweet and Christopher Sliva enjoy a thriving practice at 2902 McFarland Road in Rockford.

By Toni Rocha

or more than 10 years, Rockford Spine Center (RSC) has been a mecca for patients seeking the finest and latest surgical treatments for complex spinal issues and disability.

Located in a spacious, multi-floor clinic at 2902 McFarland Road on Rockford's east side, RSC enjoys a thriving practice built on its ability to help heal patients who suffer from a wide range of spinal problems. RSC is also globally recognized for its efforts to advance the field of spinal care medicine.

RSC's three partners, Drs. Fred Sweet, Michael Roh and Christopher Sliva, were recently featured in the 2014 Becker's Spine Review: 240 Spine Surgeons to Know. The three are the only doctors listed from Rockford, and three of just 23 surgeons listed from Illinois.

RSC is dedicated exclusively to spinal care, offering its patients the combined expertise of three fellowship-trained spine

surgeons, and a Mayo Clinic-trained physiatrist. RSC's team of experts uses a multidisciplinary approach to treat spinal disorders ranging from simple to the most complex. The team has internationally recognized expertise in surgical and non-surgical spinal disorders that has earned recognition in *Newsweek*. RSC is ranked among the Top 50 Spine Surgery Practices to Know in *Becker's Spine Review*, and has earned the Patients' Choice and Compassionate Doctor awards every year since 2011.

There's good reason for this positive attention.

Sweet says that, through the years, RSC has established a detailed protocol to prepare patients for surgery.

"Starting with the first telephone call, we begin to gather information about the patient's case and we review it all before the patient arrives for the first appointment," Sweet says. "When the patient walks in the door, we are ready from the first handshake. This allows us to focus on an accurate diagnosis, and offer the best treatment options. We confirm that the patient is medically fit to undergo surgery and study risk mitigation, including whether or not the patient is diabetic, has a history of vascular disease, even their nutritional levels."

Using the latest surgical techniques, including minimally invasive procedures, the RSC surgeons ensure that patients experiences less pain and blood loss than with traditional surgery. Then, they follow up with rigorous post-operative monitoring.

"This all leads to the best possible results," Sweet says. "These excellent outcomes are the No. 1 reason why we have received so many awards and patient accolades."

Sliva adds, "It's important to understand our history and mission. We work as a team in all that we do, including research and presenting studies on our findings. It's a collaborative effort, not only with Drs. Sweet, Roh and myself, but also with other spinal surgeons nationally."

Sliva explains that RSC's three surgeons are all fellowshiptrained. "This means that, in addition to our traditional medical education, we each spent one year of intensive study on spinal surgical treatments. We come from different backgrounds and experiences, and that's what we bring to RSC patients. We have different ideas and opinions but, together, we offer patients treatments as good as any they'll find in the world, right here in Rockford. There's no need for anyone to travel to academic centers anywhere else."

Over the past 10 years, the team devised a method using the antibiotic Vancomycin to significantly reduce staph, strep and MRSA infections in surgical sites.

"Infection is always a grave concern for any surgeon," Sweet says. "Infections can absolutely ruin a surgeon's best efforts. The number of antibiotic-resistant bugs has increased steadily and the infection rate has risen just as steadily during the past 10 to 20



Dr. Fred Sweet examines digital images at Rockford Spine Center.

years. Now many of the antibiotics we depended on are no longer effective. Surgical site infections can literally ruin a patient's life."

Sweet adds that surgeons and medical professionals must start thinking outside the box. Currently, under the Quality Care Initiative, Medicare mandates that intravenous (IV) antibiotics be started one hour prior to every surgery, even though Sweet says the IV treatment is largely ineffective against the very infections it's intended to prevent. The possible overuse of these valuable drugs has led to immunity and stronger strains of bacteria.

"To reduce the prevalence of resistant bacteria, we apply Vancomycin in powder form, directly into the surgical incision, instead of through an IV," Sweet explains. "The antibiotic stays in the wound and does not get into the patient's blood stream, eliminating the potential for resistance. By doing so, we have reduced the incidence of infection by 1,000 percent."

Not only does using Vancomycin in this form save lives and reduce pain, but it's also cost-effective. Sweet points out that a single dose of Vancomycin costs about \$6, while a bag of saline solution containing antibiotics costs around \$600. By preventing surgical infections, Sweet says, thousands of dollars are saved, while patient mortality and morbidity rates are reduced.

The partners published their findings in Spine magazine and presented them in a number of conferences. The innovative use of Vancomycin has been studied globally and is now being applied in many countries.

"It created quite a stir," Sweet says. "Now surgeons are using Vancomycin during open-heart surgery, because the area around the sternum is particularly prone to infection. The antibiotic stays in the incision for three to five days, until it breaks down naturally. The method is also beginning to be used in orthopedic procedures with metal implants."

Additionally, the team is perfecting a procedure to correct severe deformities by cutting through the spine while preserving the nerves and spinal cord. Thus, the spine can be straightened during surgery and reinforced with plates and screws, until the bone heals together.

"This methodology reduces blood loss, pinched nerves and neural damage while repositioning the spine," says Sweet. "It's been especially effective on older patients whose scoliosis has caused them to bend forward or to the side."

The surgeons also specialize in cervical surgeries and minimally invasive techniques. In fact, Dr. Roh was one of the select core faculty members for the Prestige Cervical Disc, and he traveled around the country teaching his innovative disc replacement procedure.

"It's amazing how much you can accomplish through an incision smaller than a patient's pinkie fingernail," Roh says. "Recovery times are fast, and in nearly every case, the patient has gone home the same day. The surgery to remove bone spurs, herniated disks, and spinal stenosis in the neck and back normally takes between 20 and 30 minutes."

Roh adds that patients can go back to a desk job within a few days and can expect full recovery in seven to 10 days.

"When our patients hear this, they get an incredible look of relief on their faces," Roh says. "In the past, they've heard scary stories about how painful the surgery is, as well as how long it used to take to recover. You might say they are happily shocked and have a lot less anxiety and fear about making the decision to have the surgery."

Roh says minimally invasive techniques have an extremely low risk of infection primarily because the incisions are so small and the surgery is performed so quickly.

"Out of more than 700 procedures, we have not had a single incident of infection," Roh says. "And, I credit our staff's willingness to have all of the information ready, prior to the patient's consultation, with making it possible to lay out an appropriate plan for addressing the patient's condition."

Roh specializes in treating pinched nerves and spinal cord problems in the cervical, or neck, region of the spine.

"It's one of my favorite types of surgery," Roh explains. "It requires only the most delicate touch and there are a variety of ways to approach it."

Roh says he was one of the first surgeons in the United States to use artificial replacements in neck surgeries and was among the first to perform the procedure in our region.

"Traditionally, we fused the disks together using cadaver bone, held in place with plates and screws," he says. "Now we can take out the bad disks and replace them with artificial ones that move exactly like the original, natural disks did. Patients experience no more stiffness, no inability to turn their heads one way or another."

He adds that the Federal Drug Administration recently approved a similar cervical disk replacement method that promises to open up even more opportunities to help patients with painful, disabling neck problems.

On a different level, Roh says RSC concentrates on cost containment, and is among the few who have done this without it being requested by the major medical facilities in the greater Rockford area.

"Our group has been proactive in taking steps to contain health care for both outpatient and in-hospital cases," he says. "We are well ahead of the curve, doing what responsible health care providers should do. On that note, more than one-third of our spinal surgery procedures are done on an outpatient basis, whereas 10 years ago, none of them would have been done that way."

This policy significantly reduces costs because the RSC surgeons have perfected their techniques, performing their procedures quickly and safely time and time again, says Roh.

"And I cannot credit our supportive staff enough," Sliva says. "The truth is that any business is only as good as its individual components. Each one of our staff members, from the person who answers the telephone to those who assist us with all of the background work, make it possible for us to do our part efficiently, safely and successfully."

Sliva adds that, because of the three surgeons' sharp focus on cervical, lumbar and thoracic surgery, they see thousands of



Dr. Christopher Sliva performs surgery.

patients with the same or similar ailments, usually several in the

"The nice thing about this is that our independent practice has been thriving for nearly 12 years now," Roh says. "We have gotten very good at what we do while not cutting corners, and adhering to the highest of standards in terms of patient care."

Not only do patients frequently compliment RSC's diligence. but they also call the surgeons for opinions on medical conditions not within the scope of the spine center's practice, Roh says.

"Even if we can't address their medical problem, they tell us we are the only ones who call back promptly," Roh says with a smile. "We're proud of the level of service we provide at a time when it is getting harder and harder to find independent specialty clinics. If you were to go online to our website, you would find rave reviews. That sort of word-of-mouth network has enabled us to survive in an era when independent practices are becoming increasingly rare."

Sliva adds, "Whether you call it customer service or patient care, we understand that people come to us scared. We provide a seamless transition from their primary doctors, physical therapists and other medical professionals. At the same time, we can assure them that, with our expertise in pain management, anesthesia and advanced surgical techniques, our outcomes are more predictable, safer, and get them back to living full, pain-free lives quickly."