Tulane performs region's first surgery using new robotic technology

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Evelie Rome, left, sits with Tulane neurosurgeon Dr. Christopher Maulucci during a recent follow-up visit. (Photo from Tulane Health System)

After falling at church, Evelie Rome knew something was wrong. As the pain got worse over the next days and weeks, she also knew something had to be done.

"Everything in my body hurt," said the 81-year-old Vacherie, Louisiana, resident. "It burned like fire."

Rome needed a thoracic fusion to help manage a fracture in her back, a complicated procedure in which several rods and screws are inserted into the spine to help stabilize it and reduce the chronic pain. She was referred to Dr. Christopher Maulucci

with the Tulane Center for Clinical Neurosciences, who had good news for her – not only would the procedure help ease her pain, it would also be the first in the region to use a revolutionary new robotic navigation system that provides minimally invasive surgical options for several complex spinal, orthopedic and neurological conditions.

Tulane Health System is the first hospital in the New Orleans area to offer the ExcelsiusGPS™ system, which provides surgeons with enhanced, real-time visualizations of a patient's anatomy to help improve the accuracy of procedures. Rome was the first patient to receive the benefit of the technology, with a successful surgery late last month.

"It helped a lot," she said. "In just four days, the burning stopped. I wouldn't have been able to walk without that procedure"

The robotic system's improved optics allows for minimally invasive procedures, which often result in less blood loss, less muscle damage and a potentially faster recovery when compared to traditional surgeries.

"Prior to this technology, we depended on X-rays, which don't provide us the same degree of accuracy we have now," said Dr. Maulucci, vice chair of clinical neurological surgery at Tulane University School of Medicine. "With the robot, we see exactly where the screws are going as we insert them, so we can make minor adjustments to match each patient's unique anatomy.

"Simply put, this helps us place the perfect screw, every time."

The system not only provides benefits to patients, but to operating room staff, as well. Traditional spine surgeries require multiple MRI scans throughout the procedure. The improved imaging of the new system greatly reduces that need – and greatly reduces the amount of radiation exposure endured by patients and staff.

This new technology will especially benefit people who need a lumbar, thoracic or cervical spinal fusion, Maulucci said, as well as anyone who has endured degenerative disc disease or traumatic spinal injuries. It can also help people with spinal instability due to scoliosis, spondylolisthesis, fractures and other conditions.

In addition to the ExcelsiusGPS[™] system, Tulane Medical Center's downtown campus also purchased its second da Vinci® Xi robotic surgery system, which provides minimally invasive surgical options for a variety of urologic, head and neck cancer, gynecologic, bariatric, endocrinologic and foregut surgeries. Together, the two surgery systems represent an investment of more than \$3.5 million in new robotic surgery technologies.

To learn more about Tulane Health System's neuroscience and robotic surgery programs, visit TulaneHealthcare.com.

"I wouldn't have been able to walk without that procedure."

—Evelie Rome



The ExcelsiusGPS™ system provides surgeons with enhanced, real-time visualizations of a patient's anatomy to help improve the accuracy of procedures. (Photo from Tulane Health System)