

## Minimally Invasive Spine Surgery Helps Dianne Get Back to Active Life

Until the spring of 2014, 65-year-old retired medical secretary Dianne Charter had always been healthy and active, working in her yard, playing tennis regularly and taking two-mile walks. Then she started experiencing debilitating pain in her lower back. It continued down her right leg to her knee.

"I could hardly walk, not even down the driveway to my mailbox. I couldn't bend over to tie my shoes or stand up straight," said Charter. "I was in a lot of pain."

She tried physical therapy, but it wasn't enough. Then an MRI revealed she had severe degenerative scoliosis, a lateral curvature in the normally straight vertical line of the spine caused by deterioration of the joints between the vertebrae. She also had two collapsed discs that were impinging on a nerve.

Charter met with spine specialist and neurosurgeon Dr. Adam Brown, where she learned about a minimally invasive procedure to correct scoliosis using the Mazor Robotics Renaissance™ surgical guidance system. The Mazor system is a robotics-assisted precision and planning tool that helps guide the surgeon's tools and implants in both open and minimally invasive surgery to help improve accuracy. For some patients, this means better clinical outcomes with less pain and fewer complications, enabling a faster recovery and return to daily activities.

"The Mazor Robotics Renaissance™ system is a great tool to use with patients who suffer from a wide variety of spine conditions," said Dr. Brown. "It is extremely accurate, allowing me to create a detailed blueprint of how I want to perform the surgery ahead of time. This ensures the safest trajectory is selected, which can be a major advantage to patients, especially those who have had previous surgery or those with traumatic fractures. In Ms. Charter's case, the precise preoperative planning meant we were able to perform a successful procedure that corrected the scoliosis and the disc issue."

Charter had surgery on September 29 and went home two days later. "When I woke up the pain was gone," she said. "I started walking again normally while I was still in the hospital."

A little more than a month after surgery, Charter is on her way to getting back to her active life and back on the tennis court.

"My quality of life has improved so much," she said. "I can bend, walk, tie my shoes, stand up straight, and work in my yard – all pain-free. I'm working out at the gym regularly, and within the next month I'll be back to playing tennis."



Learn more about the  
Spine Center surgeons  
and procedures available  
at NHRMC by visiting  
[nhrmc.org/spine-center](http://nhrmc.org/spine-center),  
or calling 910.667.7215.

**NHRMC Physicians  
Performing the  
Mazor Procedure:**  
George Alsina, MD  
Adam Brown, MD  
George Huffman, III, MD  
Todd Rose, MD

## NHRMC Spine Center

Surgical &  
non-surgical  
options, including  
minimally invasive  
procedures

**2,250**  
back, neck and  
spine surgeries  
a year

**5** neurosurgeons  
**3** orthopedic spine  
specialists  
**7** physical medicine  
& rehabilitation  
specialists

## Minimally Invasive Spine Surgery

Whenever appropriate, spine specialists at NHRMC use minimally invasive procedures to treat spine conditions. These techniques require smaller surgical incisions, which can lead to quicker recovery, reduced blood loss, less postoperative pain and improved function.

NHRMC is the only hospital in North Carolina to offer the Mazor Robotics Renaissance™ system, which allows surgeons to take a CT image of the patient's spine and create a customized, step-by-step 3D simulation of the ideal surgery, planning the angle and location of each incision and implanted device before entering the operating room.

During surgery, Renaissance tools act as a navigation system to guide the surgeon's hand and tools to the precise preplanned location, helping to increase the precision of the surgery.