ROBOTIC SURGERY

Kidney Cancer Removed

Dianne Arduini came to the Emergency Department at Robert Wood Johnson University Hospital (RWJ) Somerset in August with abdominal pain.

Shown: Dianne Arduini had part of her kidney and a cancerous tumor removed at Robert Wood Johnson University Hospital Somerset, with the daVinci Surgical System. With the robot, there is no open surgery, only tiny incisions, which results in minimal blood loss, less pain and a quicker recovery. Mrs. Arduini only spent two nights in the hospital and had an easy recovery.

A CT scan didn't show any cause for the pain, which gradually subsided. But doctors did see something else: a tumor on top of her kidney, which was later diagnosed as stage 2 cancer.

"I wasn't having any symptoms at all of a kidney problem," said Mrs. Arduini, 61, of Whitehouse Station. "I am so fortunate that the tumor was discovered at an early stage."

She discussed her options with Dhiren Dave, MD, a urologist and robotic surgeon at RWJ Somerset. Because the tumor was only on the top of her kidney, Dr. Dave recommended surgically removing just the top of the kidney with the tumor and leaving the other two-thirds of the kidney intact.

"Dr. Dave sat down and answered all my questions. He took as much time as my husband and I needed to make sure that we understood everything," Mrs. Arduini said.

In September, she underwent a robotic partial nephrectomy. Dr. Dave used the da Vinci Surgical System, sitting at a special console that gave him a high-definition 3-D view of the surgical site. From the console, he operated instruments inserted through tiny incisions.

Mrs. Arduini's procedure was one of the first surgeries at RWJ Somerset to use state-of-the-art fluorescence imaging. A fluorescent dye called indocyanine green was given to her via an IV. Dr. Dave used a special da Vinci scope to emit a laser light that makes the dye shine fluorescent green, showing the blood vessels and organs and where blood is flowing.

"For this type of procedure, fluorescence imaging allows the surgeon to specially and carefully identify the blood vessels to the kidney, including their individual branches," Dr. Dave said. "Blood flow to the kidney is stopped during the procedure and the dye visually helps the surgeon ensure that the blood flow is stopped to the appropriate part of the kidney prior to removal of the tumor."

The dye is also helpful to surgeons because it can turn the tumor a darker color than the surrounding healthy kidney and help ensure that they are not cutting too close to the tumor, Dr. Dave added.

Mrs. Arduini spent two nights in the hospital after the surgery and says her recovery was easier than she anticipated.

"I expected that I'd be in pain afterward and really I was not. I was just taking Tylenol for the discomfort I had from the incisions," she said.

"Because robotic surgery is so precise and requires only a few tiny incisions, patients have smaller scars, lose less blood, experience fewer complications and spend less time in the hospital than patients who have traditional surgery," said Sharon Yeh, RN, robotic surgery coordinator at RWJ Somerset.

In addition to urologic procedures, surgeons at the hospital also use the da Vinci Surgical System for gynecologic, colorectal, bariatric and general surgeries.

Mrs. Arduini enjoyed getting back to gardening around her home this fall and going on nature hikes and camping. She is looking forward to a spring trip to Disney World, where she has vacationed annually for more than 15 years.

"I am grateful to Dr. Dave and the entire staff at RWJ Somerset," she said. "Everyone was so responsive to my needs. I have never been to a hospital where everyone made me feel like they were there just for me."

Visit www.rwjuh.edu/robotics or call 1-888-MD-RWJUH

Shown: Dhiren Dave, MD, a urologist at Robert Wood Johnson University Hospital Somerset, used the daVinci Surgical System to operate on Dianne Arduini's kidney tumor. To use the robot, Dr. Dave sits behind a console with a 3D view of the surgical site and guides the instruments to perform the operation from his seat at the console.