

ROBOTIC SURGERY advantage

Complications in Robotics: Hype or Real?

ver the last several months, multiple newspapers and media outlets have reported on the complications of robotic surgery. There also have been advertisements about robotic complications by attorneys looking for clients, including the "Bad Robot Surgery" site.



RICARDO ESTAPE, M.D. Medical Director Center for Robotic Surgery

However, over the last seven years, not one report has been published that shows that robotic surgery has a higher overall complication rate than either laparoscopic or open surgery. What the

literature does show is that many more open surgeries have been converted to minimally invasive surgery, and that robotic surgery has a *lower* complication rate than open surgery by a factor of 10.

The many outspoken anti-robotic surgeons throughout the country are adding to the confusion. Recently, the president of the American College of Obstetrics and Gynecology, who is not a robotic surgeon, made a formal, negative statement about robotics without discussing it with the College or experts in the field. This is the same type of backlash we had when we started doing laparoscopy, and clearly laparoscopy is still here and doing well.

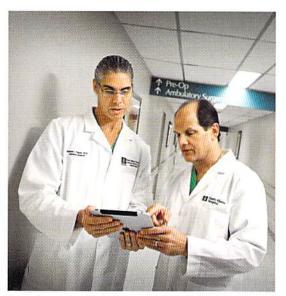
During the initial learning curve of robotics, some complications can occur

from losing sight of an instrument or not tying a knot hard enough; but even in the learning curve documentation, the overall complication rate is still lower than in open surgery. Moreover, once the learning curve is passed, the complex cases can be done with a significantly lower complication rate. Any surgery can have a complication, and robotics is no different. Every patient is counseled before any surgery about known complications of the upcoming procedure. So, the bad press about robotic surgery was baffling to me until I started getting calls from area attorneys with multiple robotic questions.

In this surgeon's opinion, it seems that the current literature is not important to the media or to attorneys. What is important is that a company with a lot of money, high stock ratings and a deep pocket can possibly be pulled into any complication lawsuit available to the attorneys. As a disclosure, I do not own stock in the company and have nothing to gain or lose, but there is not a single paper that corroborates all the current hype about robotic surgery complications.



Ricardo Estape, M.D. Medical Director Center for Robotic Surgery



Robotic surgeons Rafael Perez, M.D. (left), and Jorge Rabaza, M.D., discuss a case.



inside this issue

PAGE 2

SURGEON HELPING ADVANCE SINGLE-INCISION ROBOTIC HYSTERECTOMY

PAGE 3:

GALLBLADDER REMOVAL: COSMETIC BENEFITS WITHOUT COMPROMISING SAFETY

BACK COVER

MARK YOUR CALENDAR FOR THE MIAMI ROBOTICS SYMPOSIUM

SURGEON HELPING ADVANCE SINGLE-INCISION ROBOTIC HYSTERECTOMY

hysicians with the Center for Robotic Surgery at Baptist Health South Florida are on the forefront of a new kind of surgical technique: single-incision gynecological surgery.

Ricardo Estape, M.D., medical director, performed the first single-incision robotic hysterectomy in South Florida at South Miami Hospital in May. And he is helping advance the surgical capabilities of this technology for increased use in the future.

Dr. Estape was one of the first five surgeons in the country selected by the equipment's manufacturer to perform the procedure.

SURGERY YIELDS EXCELLENT COSMETIC RESULTS

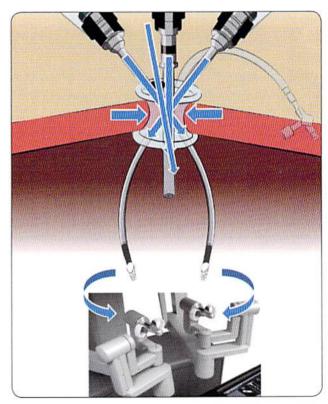
"Single-incision robotic hysterectomy is unique in that the entire procedure is performed through a 2.5-centimeter incision hidden in the natural folds of the umbilicus," Dr. Estape explained. "It essentially provides the same patient benefits as traditional laparoscopic hysterectomy. However, the primary benefit of the single-incision approach is aesthetics. The surgery leaves no visible scar."

The new robotic technology allows a port to be placed in the small opening in the umbilicus. The doctor inserts the robot's camera and two armlike instruments into the patient's abdomen through this single port.

ASSESSING BENEFITS AND LIMITATIONS

The FDA has approved the use of this instrumentation to treat benign conditions requiring a hysterectomy and removal of the ovaries and fallopian tubes. Though Dr. Estape is one of the most experienced surgeons using this specific technology, he is taking a very cautious approach.

"Although this is cutting-edge technology, it has limitations. The technology for single-incision robotic hysterectomy does not involve wristed instruments, which limits surgical movements and narrows the field of work," he said. "The technology can yield excellent results in the appropriate patient, but its surgical capabilities are still reduced compared with traditional laparoscopic technology. It primarily benefits patients in whom cosmetic results are a primary focus."



In single-incision robotic hysterectomy, the instruments and camera are inserted via a single site, or port. Remote center technology (bottom of illustration) minimizes instrument collisions, as well as crowding and trauma.

EXPERTISE HELPING IMPROVE SURGICAL APPROACH

Dr. Estape, who has performed thousands of robotic gynecologic surgeries at Baptist Health, is working with engineers who build the robotic system to advance this technology and rectify these limitations. This collaboration involves demonstrating the challenges of surgery for engineers in their laboratory and in the operating room as well as discussing future needs. Dr. Estape hopes this partnership will improve and expand the use of the surgery.

"Single-incision hysterectomy has a very promising future," said Dr. Estape. "It has garnered incredible interest from both physicians and patients. While the technology right now has some limitations, it will most likely be everything we need it to be in the near future."