

THE DA VINCI SURGICAL SYSTEM

Robotic assisted laparoscopic surgery allows quicker and less painful recovery

By: [VINCENZO SABELLA, MD]



It was in the late 18th century when the rules of the 'art' of surgery started to take shape. There were invaluable contributions of the magnitude of John Hunter (1728-1793) whose writings shed light on the anatomy of the female pelvis. The Scottish gynecologic surgeon Sir James J. Simpson (1811-1870) and personal physician of Queen Victoria urged his colleagues to perform operations on their patients' kitchen tables to avoid hospital infections.

Those were the times when the principles of surgery included having a good exposure of the surgical field with a large incision. Surgery has evolved in knowledge and technology, however, still nowadays, not all surgeons chose to train in newer techniques.

The truth is that minimally invasive techniques are relatively new to medicine with a great number of supporters and an even greater number of opponents, not unlike Joseph Lister's ideas of antiseptics in the mid 1860's. Minimally invasive surgery refers to a mode of access to the body mainly by utilizing optical devices highly specialized instruments of small caliber in order to perform procedures that in the past were done exclusively through large incisions.

For instance, a hysterectomy (removal of the uterus) can be achieved by laparoscopy

with an incision and large instruments or by laparoscopy with just punctures, no incision and thin instruments. Currently, gynecologists at the Institute For Women's Health are able to perform by laparoscopy almost any procedure previously performed by laparotomy, with a few exceptions of course.

Operative laparoscopy allowed surgeons to offer their patients a quick recovery and a fast return to normal activities with an obvious positive impact in patients' productivity. However laparoscopy is still not well accepted among many physicians due to the difficult learning curve required to master these techniques.

The da Vinci Surgical System is the most recent advance in laparoscopic surgery that works optimizing the laparoscopic techniques and decreasing human limitations of the surgeons.

Currently the largest group of trained surgeons for robotic gynecologic procedures in San Antonio is the Institute For Women's Health. Drs. Victor L. Casiano, Susan A. Crockett, Joseph R. Garza, Camilo Gonima, Cesar Reyes and myself are all highly trained in robotic surgery and have been providing skillful and convenient surgical care to patients with this technology since 2005 when the system was FDA approved for gynecology.

The da Vinci Surgical System is a sophisticated robotic platform designed to perform complex laparoscopic procedures with great accuracy. It minimizes blood loss and post-operative pain by allowing gentle and precise movements whole giving the surgeon skills that are natural to the movements of the hands and wrists only possible with a laparotomy and large instruments.

It consists of a console for the surgeon, a robot that connects its four interactive arms to the patient and a 3-D video/audio system. The system is designed to work as an extension of the surgeon's brain and hands. It does not perform any movements independently.

The main advantage of this technique is the delivery of high quality surgical treatments for women. Also, the blood loss and the pain are significantly less when compared to other techniques, not to mention the absence of an abdominal incision. Women can return to their normal activities within 2 to 3 weeks following the procedure.

The Most Common Gynecologic Procedures Performed Using Robotic Surgery

1. Hysterectomy: performed for multiple conditions such as fibroids, excessive bleeding, pelvic pain, endometriosis and prolapse, among others
2. Bladder suspension: performed for bladder prolapse and/or urinary incontinence (loss of bladder control)
3. Vaginal suspension: performed for cases of vaginal vault after hysterectomy
4. Tubal Anastomosis: adequate for women who want to restore their fertility after having a bilateral tubal ligation
5. Gynecologic cancers

In summary, surgeons at the Institute For Women's Health feel that this technique is an important advance in gynecologic surgery and we have trained to make it available for our patients.

For more information, please call 34-WOMAN or visit ifwh.org.

Vincenzo Sabella is a Diplomate of the American Board of Obstetrics and Gynecology. Dr. Sabella earned his M.D. from the Universidad Autonoma de Nuevo Leon in Monterrey, Mexico and completed his residency at the University of Texas Health Science Center in San Antonio. Dr. Sabella is a pioneer in robotic surgery and offers the procedure for most pelvic conditions. He is fluent in Spanish, Italian, and English.