One Robot + One Physician = Two Women

Whose Lives Were Changed

"I didn't want to be cut from stem to stern," says Heidi Simmons, 48, referring to what motivated her to seek out an alternative to traditional open surgery to remove a large fibroid tumor in her uterus last year. "The first gynecologist I saw told me that the only way to remove it was through a 12-inch incision from my rib cage to my pelvis," she recalls." "That freaked me out."

It also motivated Heidi to go online and research other treatment options. "I started by educating myself about fibroids," she says. She learned that they are non-cancerous (benign) growths in the uterus that occur in 30 to 40 percent of women over age 40. They don't need to be removed unless they cause symptoms that interfere with a woman's normal activities.

"My fibroid was the size of a football and it was pressing down on my ureters and bladder so I couldn't urinate," Heidi says. A hysterectomy — surgery to remove the uterus — was imperative.

In the course of her Internet research, Heidi came across information about the da Vinci® S HD™ System, an advanced, minimally invasive alternative to both open surgery and traditional laparoscopy that is increasingly used for gynecologic and urologic procedures. Then she discovered that not only did Eisenhower Medical Center have one of these state-of-the-art systems, but that Eisenhower's Enrique Jacome, MD was a board-certified gynecologic surgeon with extensive experience using the da Vinci system. In fact, Dr. Jacome was the first surgeon in Riverside County to use the system starting in 2008. To date, he has performed more than 327 robotically assisted gynecologic procedures — nearly twice the volume of anyone else in the region.

"To find the machine and a surgeon with Dr. Jacome's experience right in my own backyard…I couldn't believe it," says Heidi, who lives in the Palm Springs area. "I kept my fingers crossed that he would take my case. The other gynecologist said robotic surgery wasn't advisable because my fibroid was so large and complex."

Dr. Jacome not only took Heidi's case but felt confident that she was an ideal candidate for robotically assisted surgery (see below for more about robotic-assisted of surgery and when it is an appropriate option).

After a comprehensive workup, including an advanced ultrasound examination, Dr. Jacome determined that Heidi's tumor had tilted, contorted and twisted her uterus, ovaries and cervix, making surgical removal of her uterus and the tumor extremely challenging.

To complicate things further, a large cyst was discovered on her left ovary. Dr. Jacome knew Heidi would appreciate the benefits of a minimally invasive procedure, including less blood loss, pain and scarring, lower risk of postoperative complications and a faster recovery.

"In a case like Ms. Simmons', it would have required a lot of retraction and packing to get the bowel out of the way, which means a lot of inflammation within the abdomen," explains Dr. Jacome. "This leads to more pain and delayed resumption of bowel activity, which means more days in the hospital, more consumption of narcotics, more nausea and vomiting, a higher risk of infection and delayed recovery."

While most robotically assisted hysterectomies are completed in less than two hours, Heidi's procedure took five hours, underscoring the complexity of her condition. Dr. Jacome painstakingly removed the tumor, piece by piece, and he also was able to excise the cyst on her left ovary — leaving the ovary intact.

"His experience and knowing that machine so well made all the difference," Heidi says. "Once he was in there, he's looking at things magnified in 3-D, on a high-definition monitor that's superior to the human eye. He had to maneuver between the ureters, the cervix, figure out blood supply…I know for certain that if I'd had traditional open surgery, things would not have turned out so well."

"We need to bring awareness among women that there are minimally invasive options to address almost any gynecologic condition they may suffer from,"
—Dr Jacome

The benefits of a minimally invasive surgery were immediately evident. "I had my surgery on a Wednesday, left the hospital on Thursday afternoon, and was off the prescribed pain medications by Friday," she continues. "I went on vacation with my family ten days after the procedure. And today the only evidence of the surgery are the five small points of the da Vinci's entry; the incision scars — each about half an inch in length — are barely visible.

"I'm feeling so much better than my previous 'normal,'" she says. In addition, she notes, she's finally able to lose weight and regain her waistline with the tumor out of the way. "I've dropped four sizes," she says. "I want to still wear skinny jeans and a bikini, and now I can."

"I'm just so grateful this technology exists," Heidi adds. "I want women to know that even if your gynecologist delivered every one of your babies, just because he or she doesn't do robotic surgery doesn't mean you have to be cut open for a hysterectomy. We have options. We can take care of ourselves."

Pelvic Organ Prolapse A Common Problem with a New Solution

Lene Danielson, 51, was dealing with a gynecologic problem called pelvic organ prolapse (POP). Nearly one quarter of women — half of them between 30 and 60 years old — experience some form of POP, which is when organs such as the uterus, vagina, urethra, bladder or rectum shift downward and bulge into or even out of the vaginal canal. It can happen when the muscles that hold the pelvic organs in place get weak or stretched as a result of childbirth or surgery, or simply as a result of genetic predisposition to the condition.

"I'm not an easily embarrassed person, but having my insides coming out of me was awful," Lene says. "I would hide in the closet to change clothes, I wouldn't wear a bathing suit, and I had to run to the bathroom every two minutes. I thought I had cancer and was scared to go to the doctor."

Lene, a mail carrier, had been seeing an endocrinologist for a thyroid condition and confided her concerns. The endocrinologist referred Lene to an internist who then recommended that she see Dr. Jacome to discuss robotically-assisted laparoscopic surgery.

"Dr. Jacome was awesome," Lene says. "He explained that the prolapse was from having had two kids and from the heavy lifting I do at my job. I was so relieved to know it wasn't cancer!"

Lene was also an ideal candidate for robotically assisted laparoscopic surgery. "We took out Ms. Danielson's uterus, and then reconstructed her pelvic area by suspending the falling organs to a fixed structure on a part of her lower back called the promontory," Dr. Jacome relates. "We took a long piece of mesh, fixed it to the cervix and attached it to the promontory of the sacrum to hold things in place. This is the gold standard of care for treating vaginal or uterine prolapse."

"The beauty of using the da Vinci system is that we can perform the exact same procedure that is done with open surgery but without all the risks and side effects, and with small incisions," Dr. Jacome continues.

Plus, he points out; this procedure requires a significant amount of suturing. “Using the technological advances offered by this system, we can get inside and move around with less difficulty than with conventional ‘straight-stick’ laparoscopy,” he says. This is because the tiny da Vinci instruments are articulated, which means that they not only open and close but also fully turn and twist, more naturally mimicking the human hand and wrist.

Lene is delighted with the outcome of her surgery.

“I couldn’t believe that I was up walking the same day I had the operation,” she says. “I was out of work for about five weeks after surgery, but that’s only because I lift heavy stuff. If I had a desk job, I could have gone back to work the week after surgery.

“I have five little scars that are hardly there, which is amazing compared to the mile-wide scar women used to get with open surgery,” she adds. “Most important, I feel like a million bucks.”

About the da vinci surgical system

While often referred to as “robotic surgery,” the da Vinci surgical system doesn’t put a robot at the controls. Rather, the surgeon is always in control of every aspect of the surgery with the assistance of the robotic surgical system, which eliminates tremor and magnifies the surgical field through a three-dimensional image. But the tiny, articulated robotic instruments can make all the movements of the human hand in a very small space — greatly improving the surgeon’s dexterity and range of motion compared to traditional “straight-stick” laparoscopic surgery.

“Imagine if your hands and fingers had no mobility except in one direction,” says Dr. Jacome, noting that this is a limitation of straight-stick laparoscopy. “ But having articulated instruments enables surgeons to perform complex procedures in confined, delicate spaces like the pelvic area. It’s something we once could only dream about.”

And the patient benefits are tremendous.

“When you perform traditional open surgery with a large abdominal incision, patients lose blood and are exposed to transfusions,” Dr. Jacome explains. “But if you can minimize the damage inside — as we do with robotically-assisted laparoscopic surgery — the patient has less pain, less chance of transfusion or infection, less need for narcotics, less nausea and vomiting, and faster resumption of bowel function and the ability to eat normally,” he continues. “This leads to shorter hospitalization and the ability to resume normal activities a lot sooner than she would have with a large incision.”

There is also the cosmetic advantage of significantly less scarring since the incisions are so small.

Surprisingly, however, while more than 700,000 women undergo hysterectomy every year — making it the most commonly performed gynecologic surgery in the world — 66 percent of these procedures are still performed openly, Dr. Jacome notes.

“We need to bring awareness among women that there are minimally invasive options to address almost any gynecologic condition they may suffer from,” he says. “If a woman wants a minimally invasive procedure that requires abdominal access (not vaginal) as medically indicated by her physician, then robotic-assisted surgery may be a great option.”

When is robotically assisted surgery not an option?

“With robotic-assisted surgery, we must place the patient in what is called the Trendelenberg position,” Dr. Jacome explains. The patient is lying flat on her back and inclined so that the pelvis is higher than the head.

“If a patient has severe asthma, a cardiac condition or cardiopulmonary compromise, it precludes us from positioning the patient in this way because of potential anesthesia complications, so these patients are not good candidates for robotic-assisted surgery,” he says.

“But most everyone else, regardless of weight, age, number of previous surgical procedures, the size of the mass, if they have cancer or infertility — they are all candidates,” he adds.

When opting for this minimally invasive approach, Dr. Jacome also urges women to take into consideration a surgeon’s experience with the da Vinci surgical system. “In the hands of a well-trained surgeon, and for many, many women, it might be the best option,” he adds.

Notably, Intuitive Surgical, the manufacturer of the da Vinci Surgical System, named Eisenhower Medical Center a teaching center, one of only 29 in the country where physicians like Dr. Jacome have been chosen for their excellent patient outcomes to assist physicians who are new to using the da Vinci. Dozens of surgeons from across the United States have undergone training on the system at Eisenhower — testament to the experience and expertise that resides here.

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