

# Considering Hysterectomy?

Learn about minimally invasive  
*da Vinci*® Surgery



*da Vinci*.Surgery

## The Conditions:

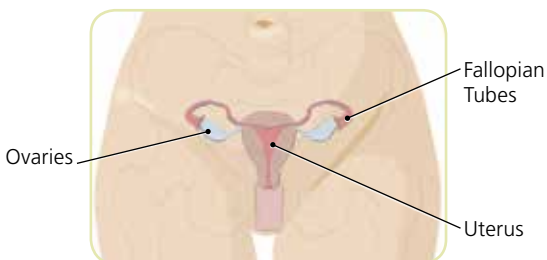
### Chronic Pain, Heavy Bleeding, Fibroids, Endometriosis, Adenomyosis, Prolapse

Many benign (non-cancerous) conditions can affect a woman's reproductive system, which includes the uterus, vagina, ovaries and fallopian tubes. Most of these conditions affect the uterus, which is the hollow, fist-sized organ that holds a baby during pregnancy.

Common benign conditions include: fibroids which are growths in and/or around the uterus, endometriosis which occurs when your uterine lining grows outside the uterus, adenomyosis which occurs when your uterine lining grows into the wall of the uterus, and pelvic prolapse which is the slipping of the uterus, vagina and/or bladder.

Gynecologic conditions can cause many different symptoms, or no symptoms. Some of the more common symptoms can include: pelvic pain, heavy bleeding, irregular periods, fatigue, unusual bloating, pain during intercourse and infertility.

If your symptoms are severe, your doctor may recommend non-surgical treatments or a surgical option, such as hysterectomy (removal of the uterus). An estimated one third of all U.S. women will have a hysterectomy by age 60.<sup>1</sup> While this figure is lower in many other countries, it is still a common surgical procedure worldwide.<sup>2</sup>



# The Surgery:

## Hysterectomy

If your doctor recommends a hysterectomy, there are a few ways your uterus can be removed. Your surgeon can remove your uterus via a laparoscopic (minimally invasive) hysterectomy, abdominal hysterectomy or vaginal hysterectomy.

**Laparoscopic and *da Vinci* Hysterectomy:** Surgery is done using traditional laparoscopy or robotically-assisted *da Vinci* Surgery. This means your surgeon operates using long instruments inserted through a few small incisions in the abdomen.

One of the instruments has a tiny camera at the end. The camera sends images to a video monitor in the operating room to guide doctors during the operation.

With minimally invasive surgery, there are various options for removing the uterus. Your surgeon will recommend the option he/she thinks is best for you.



**Vaginal Hysterectomy:** Surgery is performed through a cut in your vagina. The surgeon takes your uterus out through this incision and closes it with stitches.

**Abdominal Hysterectomy (Open Surgery):**

Your surgeon removes your uterus through a large open incision. The incision must be large enough for his or her hands to fit inside your body and touch your organs.



Open Surgery  
Incision

Laparoscopy  
Incisions

*da Vinci*  
Incisions



# da Vinci Surgery:

## A Minimally Invasive Surgical Option

If you plan to have a hysterectomy, ask your doctor about *da Vinci* Surgery. Using the *da Vinci* System, your surgeon makes a few small incisions - similar to traditional laparoscopy. The *da Vinci* System features a magnified 3D HD vision system and special instruments that bend and rotate far greater than the human hand. *da Vinci* enables your doctor to operate with enhanced vision, precision and control.

As a result of *da Vinci* technology, *da Vinci* Hysterectomy offers the following potential benefits as compared to open surgery:

- › Reduced complication rate<sup>3, 4, 5</sup>
- › Reduced length of hospital stay<sup>3, 4, 5, 6</sup>
- › Reduced blood loss and less likelihood for transfusion<sup>3, 5, 6</sup>

As compared to traditional laparoscopy:

- › Reduced complication rate<sup>3, 7</sup>
- › Reduced length of hospital stay<sup>3, 4, 6, 7, 8, 9</sup>
- › Reduced blood loss<sup>3, 4, 6, 9</sup>
- › Reduced chance of procedure converting to an abdominal procedure<sup>4, 7</sup>
- › Less likelihood of blood transfusion<sup>10</sup>

As compared to vaginal surgery:

- › Reduced length of hospital stay<sup>4, 6</sup>
- › Reduced blood loss<sup>4, 6</sup>

### **Risks & Considerations Related to Hysterectomy, Benign (removal of the uterus and possibly nearby organs):**

Injury to the ureters (ureters drain urine from the kidney into the bladder), vaginal cuff problem (scar tissue in vaginal incision, infection, bacterial skin infection, pooling/clotting of blood, incision opens or separates), injury to bladder (organ that holds urine), bowel injury, vaginal shortening, problems urinating (cannot empty bladder, urgent or frequent need to urinate, leaking urine,

slow or weak stream), abnormal hole from the vagina into the urinary tract or rectum, vaginal tear or deep cut. Uterine tissue may contain unsuspected cancer. The cutting or morcellation of uterine tissue during surgery may spread cancer, and decrease the long-term survival of patients.

### **Important Information for Patients**

Serious complications may occur in any surgery, including *da Vinci*<sup>®</sup> Surgery, up to and including death. Examples of serious or life-threatening complications, which may require prolonged and/or unexpected hospitalization and/or reoperation, include but are not limited to, one or more of the following: injury to tissues/organs, bleeding, infection and internal scarring that can cause long-lasting dysfunction/pain. Risks of surgery also include the potential for equipment failure and/or human error. Individual surgical results may vary.

Risks specific to minimally invasive surgery, including *da Vinci* Surgery, include but are not limited to, one or more of the following: temporary pain/nerve injury associated with positioning; temporary pain/discomfort from the use of air or gas in the procedure; a longer operation and time under anesthesia and conversion to another surgical technique. If your doctor needs to convert the surgery to another surgical technique, this could result in a longer operative time, additional time under anesthesia, additional or larger incisions and/or increased complications.

Patients who are not candidates for non-robotic minimally invasive surgery are also not candidates for *da Vinci*<sup>®</sup> Surgery. Patients should talk to their doctor to decide if *da Vinci* Surgery is right for them. Patients and doctors should review all available information on non-surgical and surgical options in order to make an informed decision. For Important Safety Information, including surgical risks, indications, and considerations and contraindications for use, please also refer to [www.davincisurgery.com/safety](http://www.davincisurgery.com/safety) and [www.intuitivesurgical.com/safety](http://www.intuitivesurgical.com/safety).

## The Enabling Technology: *da Vinci* Surgical System

The *da Vinci* Surgical System is designed to provide surgeons with enhanced capabilities, including high-definition 3D vision and a magnified view. Your doctor controls the *da Vinci* System, which translates his or her hand movements into smaller, more precise movements of tiny instruments inside your body.



Though it is often called a “robot,” *da Vinci* cannot act on its own. Surgery is performed entirely by your doctor. Together, *da Vinci* technology allows your doctor to perform routine and complex procedures through just a few small openings, similar to traditional laparoscopy.

The *da Vinci* System has brought minimally invasive surgery to more than 2 million patients worldwide. *da Vinci* - changing the experience of surgery for people around the world.

# Your doctor is one of a growing number of surgeons worldwide offering *da Vinci*® Surgery.

For more information and to find a *da Vinci* surgeon near you, visit:  
[www.daVinciSurgery.com](http://www.daVinciSurgery.com)

<sup>1</sup>"Hysterectomy". Medline Plus; National Institutes of Health. <http://www.nlm.nih.gov/medlineplus/hysterectomy.html> <sup>2</sup> National Institutes of Health. Hysterectomy. <http://www.nlm.nih.gov/medlineplus/ency/article/002915.htm> <sup>3</sup> 3. Ho C et al. "Robot-Assisted Surgery Compared with Open Surgery and Laparoscopic Surgery: Clinical Effectiveness and Economic Analyses." Ottawa (ON): Canadian Agency for Drugs and Technologies in Health; 2011 Sep. <sup>4</sup> Landeen, et al. "Clinical and Cost Comparisons for Hysterectomy via Abdominal, Standard Laparoscopic, Vaginal and Robot-assisted Approaches." South Dakota Medicine 64.6 (2011): 197-209. Print. <sup>5</sup> Geppert B et al. "Robot-assisted laparoscopic hysterectomy in obese and morbidly obese women: surgical technique and comparison with open surgery." Acta Obstet Gynecol Scand. 90.11 (2011): 1210-1217. doi: 10.1111/j.1600-0412.2011.01253.x. Epub. <sup>6</sup> Martino, M et al. "A Comparison of Quality Outcome Measures in Patients Having a Hysterectomy for Benign Disease: Robotic vs. Non-robotic Approaches." Journal of Minimally Invasive Gynecology 21.3 (2014): 389-93. Web. <sup>7</sup> Scandola, M et al. "Robot-Assisted Laparoscopic Hysterectomy vs Traditional Laparoscopic Hysterectomy: Five Metaanalyses." Journal of Minimally Invasive Gynecology 18.6 (2011): 705-15. Print. <sup>8</sup> Wright, J et al. "Robotically Assisted vs Laparoscopic Hysterectomy Among Women With Benign Gynecologic Disease." Jama 309.7 (2013): 689-98. Print. <sup>9</sup> Orady, M et al. "Comparison of Robotic-Assisted Hysterectomy to Other Minimally Invasive Approaches." JSLS, Journal of the Society of Laparoendoscopic Surgeons 16.4 (2012): 542-48. Print. <sup>10</sup> Rosero, E et al. "Comparison of Robotic and Laparoscopic Hysterectomy for Benign Gynecologic Disease." Obstetrics & Gynecology 122.4 (2013): 778-86. Print.