

Facing a Hysterectomy?

If you've been diagnosed with early stage gynecologic cancer, learn about minimally invasive **da Vinci® Surgery**



da Vinci.  **Surgery**

The Condition:

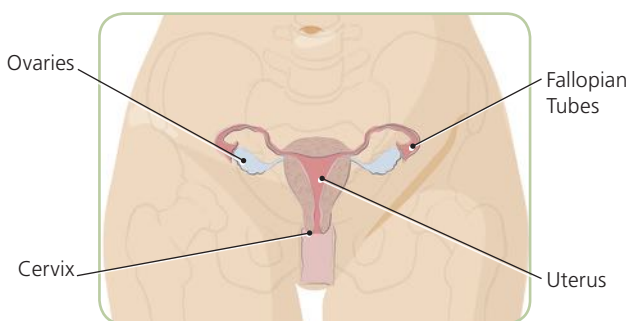
Early Stage Gynecologic Cancer

A variety of gynecologic cancers can affect your reproductive system, which consists of the uterus, vagina, ovaries and fallopian tubes. The uterus is a hollow, muscular organ and the fallopian tubes and ovaries are located on each side of the uterus.

Gynecologic cancer is any cancer that starts in one of your reproductive organs. The most common types are: cervical, endometrial (uterine) and ovarian cancer.

Each gynecologic cancer is unique and has different signs, symptoms and risk factors. It is important to get regular gynecologic exams since treatment is more effective when cancer is found early.

If you are facing gynecologic cancer, your doctor will recommend the best treatment plan for you based on the location and stage of the cancer.



The Surgery:

Hysterectomy

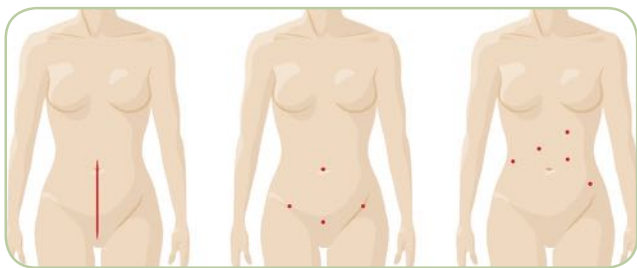
If you have a gynecologic cancer - such as cancer of the uterus or cervix - your doctor may recommend a hysterectomy (removal of your uterus). Hysterectomy is a common procedure. An estimated one third of all U.S. women have a hysterectomy by age 60.¹ While this figure is lower in many other countries, it is still a common procedure worldwide.² The type of hysterectomy you have will depend upon your medical history and health, as well as the location and stage of the cancer.

A hysterectomy may be performed with open abdominal surgery using a long vertical incision (from the pubic bone to just above the navel). The incision must be large enough for your surgeon to fit his or her hands and instruments inside your body. Open surgery allows doctors to see and touch your organs as they operate.



A hysterectomy can also be performed using minimally invasive laparoscopic surgery. This means your surgeon operates through a few small incisions in your abdomen using long-handled instruments and a tiny camera. The camera sends images to a video monitor in the operating room to guide your surgeon during the procedure.

There is another minimally invasive surgical option for women planning to have a hysterectomy: *da Vinci*[®] Surgery.



Open Surgery
Incision

Laparoscopy
Incisions

da Vinci
Incisions



da Vinci Surgery:

A Minimally Invasive Surgical Option

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 tiny instruments that rotate far greater than the human wrist. These features enable your surgeon to operate with enhanced vision, precision, dexterity and control.

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

- › More precise removal of cancerous tissue (at two year follow-up)³
- › Fewer complications^{3,4,5,6,7,8,9}
- › Less blood loss^{3,4,5,6,7,8,9,10}
- › Less pain^{9,11}
- › Shorter hospital stay (one day in many cases)^{3,4,5,6,7,9,10}
- › Quicker recovery⁸
- › Small incisions for minimal scarring

As a result of *da Vinci* technology, *da Vinci* Hysterectomy offers the following potential benefits compared to traditional laparoscopy:

- › Similar/fewer complications,⁸ including major complications^{12,13}
- › Fewer conversions to open surgery^{10,12,14}
- › Less blood loss^{5,7,12}
- › Less need for narcotic pain medicine¹⁵
- › Shorter hospital stay^{7,10,12}
- › Quicker recovery⁸



Risks & Considerations Related to Hysterectomy & *da Vinci* Surgery:

Potential risks of any hysterectomy procedure include:⁷

- Separation of the vaginal incision
- Blocked lung artery
- Urinary tract injury

Important Information for Patients:

All surgery presents risk, including *da Vinci* Surgery. Results, including cosmetic results, may vary.

Serious complications may occur in any surgery, up to and including death. Examples of serious and life-threatening complications, which may require hospitalization, include injury to tissues or organs; bleeding; infection, and internal scarring that can cause long-lasting dysfunction or pain. Temporary pain or nerve injury has been linked to the inverted position often used during abdominal and pelvic surgery.

Patients should understand that risks of surgery include potential for human error and potential for equipment failure. Risks specific to minimally invasive surgery may include: a longer operative time; the need to convert the procedure to other surgical techniques; the need for additional or larger incision sites; a longer operation or longer time under anesthesia than your surgeon originally predicts. Converting the procedure to open could mean a longer operative time, long time under anesthesia, and could lead to increased complications. Research suggests that there may be an increased risk of incision-site hernia with single-incision surgery. Patients who bleed easily, have abnormal blood clotting, are pregnant or morbidly obese are typically not candidates for minimally invasive surgery, including *da Vinci* Surgery. Other surgical approaches are available. Patients should review the risks associated with all surgical approaches. They should talk to their doctors about their surgical experience and to decide if *da Vinci* is right for them. For more complete information on surgical risks, safety and indications for use, please refer to <http://www.davincisurgery.com/safety>.

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

For more information about *da Vinci* Hysterectomy and to find a *da Vinci* surgeon near you, visit:
www.daVinciHysterectomy.com

¹ Available from: <http://www.womenshealth.gov/publications/our-publications/fact-sheet/hysterectomy.pdf> ² National Institutes of Health., "Hysterectomy." Available from: <http://www.nlm.nih.gov/medlineplus/hysterectomy.html> ³ Lau S, et al. Outcomes and cost comparisons after introducing a robotics program for endometrial cancer surgery. *Obstet Gynecol.* 2012 Apr;119(4):717-24. doi: 10.1097/AOG.0b013e31824c0956. ⁴ Paley PJ, et al. Surgical outcomes in gynecologic oncology in the era of robotics: analysis of first 1000 cases. *Am J Obstet Gynecol.* 2011 Jun;204(6):551.e1-9. Epub 2011 Mar 16. ⁵ Estape R, et al. Robotic-assisted total laparoscopic hysterectomy and staging for the treatment of endometrial cancer: a comparison with conventional laparoscopy and abdominal approaches. *J Robotic Surg* 2009 DOI 10.1007/s11701-011-0290-7. ⁶ DeNardis SA, et al. Robotically assisted laparoscopic hysterectomy versus total abdominal hysterectomy and lymphadenectomy for endometrial cancer. *Gynecologic Oncology* 2008;111:412-417. ⁷ Boggess JF, et al. A comparative study of 3 surgical methods for hysterectomy with staging for endometrial cancer. *Am J Obstet Gynecol* 2008. (For port placement, see figure 3) ⁸ Bell MC, et al. Comparison of outcomes and cost for endometrial cancer staging via traditional laparotomy, standard laparoscopy, and robotic techniques. *Gynecologic Oncology* 2008;113:407-411. ⁹ Halliday D, et al. Robotic radical hysterectomy: comparison of outcomes and cost. *J Robotic Surg* (2010) 4:211–216 DOI 10.1007/s11701-010-0205-z ¹⁰ Magrina JF, et al. Robotic surgery for endometrial cancer: comparison of perioperative outcomes and recurrence with laparoscopy, vaginal/laparoscopy and laparotomy. *Eur J Gynaecol Oncol.* 2011;32(5):476-80. ¹¹ Lowe MP, et al. A comparison of robot-assisted and traditional radical hysterectomy for early-stage cervical cancer. *Journal of Robotic Surgery* 2009:1-5. ¹² Lim PC, et al. A comparative detail analysis of the learning curve and surgical outcome for robotic hysterectomy with lymphadenectomy versus laparoscopic hysterectomy with lymphadenectomy in treatment of endometrial cancer: a case-matched controlled study of the first one hundred twenty two patients. *Gynecol Oncol.* 2011 Mar;120(3):413-8. Epub 2010 Dec 30. ¹³ Wright JD, et al. *JAMA*, February 20, 2013—Vol 309, No. 7 689. ¹⁴ Scandola M, et al. Robot-assisted laparoscopic hysterectomy vs traditional laparoscopic hysterectomy: five metaanalyses *J Minim Invasive Gynecol.* 2011 Nov-Dec;18(6):705-15. ¹⁵ Martino MA, et al. A cost analysis of postoperative management in endometrial cancer patients treated by robotics versus laparoscopic approach. *Gynecol Oncol.* 2011 Dec;123(3):528-31. Epub 2011 Oct 2.

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 been used successfully worldwide in approximately 1.5 million various surgical procedures to date. *da Vinci* - changing the experience of surgery for people around the world.