Facing a Hysterectomy?

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





The Surgery: Hysterectomy

If you have gynecologic cancer - such as cancer of the uterus or cervix - your doctor may suggest a hysterectomy (removal of your uterus).

A hysterectomy may be performed with open surgery or minimally invasive surgery.

Open Surgery: With open surgery, doctors operate through a long incision from the pubic bone to just above the navel. The incision (cut) must be large enough for your surgeon to fit his or her hands and instruments inside your body to reach your organs.

Minimally Invasive Surgery: A hysterectomy can also be done using minimally invasive surgery. With traditional laparoscopy, your surgeon operates through a few small incisions in your abdomen using long instruments and a tiny camera. The camera sends images to a video screen to guide doctors during surgery.

There is another minimally invasive surgery option (similar to laparoscopy) for women planning to have a hysterectomy (simple total or radical): robotically-assisted *da Vinci*® Surgery.



Open Surgery Incision

Laparoscopy Incisions

da Vinci Incisions

A simple total hysterectomy is the removal of the uterus, cervix and possibly ovaries and fallopian tubes; it may also involve lymph node removal. A radical hysterectomy is the removal of the uterus, cervix, upper portions of the vagina, and possibly ovaries and fallopian tubes; it may involve lymph node removal and tissue surrounding the organ.

da Vinci Surgery: A Minimally Invasive Surgery Option

The da Vinci Surgical System has a 3D HD vision system that gives doctors a magnified view inside the body. It also has tiny instruments that bend and rotate far greater than the human hand. These features enable surgeons to operate with enhanced vision, precision, and control

da Vinci Hysterectomy (simple total) offers the following potential benefits compared to open surgery:

- Fewer complications^{1,2,3,4}
- Less estimated blood loss^{1,2,3,4,5} & fewer transfusions^{1,2,3,4}
- > Shorter hospital stay^{1,2,3,4,5}

da Vinci Hysterectomy (simple total) offers the following potential benefits compared to traditional laparoscopy:

- Similar or fewer complications^{1,3,4,5}
- Less estimated blood loss & similar or fewer blood transfusions^{1,3,4,5}



- > Similar or shorter hospital stay^{1,3,4,5}
- > Similar operating time^{1,3,4,5}
- Similar or lower conversion rates (switch to open surgery)^{1,3,4,5}

da Vinci Hysterectomy (radical) offers the following potential benefits **compared to open surgery**:

- > Similar complication rates^{1,2,4,6,7,8,9}
- Less estimated blood loss^{1,2,3,4,6,7,8,9} & fewer transfusions^{1,2,4,6,7,9}
- > Shorter hospital stay^{2,3,4,6,7,8,9}
- Less need for narcotic pain medicine after surgery^{8,9}

da Vinci Hysterectomy (radical) offers the following potential benefits **compared to traditional laparoscopy**:

- > Similar complications^{1,4,6,7,9}
- > Similar or less estimated blood loss^{4,6,7,9} & blood transfusions^{1,4,6,7,9}
- Similar or shorter hospital stay^{1,4,6,7,9}
- > Similar operating time^{1,4,6,7,9}
- > Similar conversion rates (switch to open surgery)^{1,4,6,7}

Your surgeon is 100% in control of the System, which translates his or her hand movements into smaller, precise movements of tiny instruments inside your body.

The da Vinci System has brought minimally invasive surgery to more than 3 million patients worldwide.

Risks and Considerations Related to Hysterectomy, Cancer (removal of the uterus and possibly nearby organs): injury to the ureters (the 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.

Serious complications may occur in any surgery, including da Vinci® Surgery, up to and including death. Risks include, but are not limited to, injury to tissues and organs and conversion to other surgical techniques. 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. Individual surgical results may vary. Patients who are not candidates for non-robotic minimally invasive surgery are also not candidates for da Vinci 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. Please also refer to www.daVinciSurgerv.com/Safetv for Important Safety Information.

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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 nearest you, visit: www.daVinciSurgery.com

^{1.} O'Neill M., et al. Robot-assisted hysterectomy compared to open and laparoscopic approaches: systematic review and meta-analysis. Archives of Gynecology and Obstetrics. 287: 907-918. (2013) 2. O'Sullivan S. HIQA Ireland Health technology assessment of robot-assisted surgery in selected surgical procedures. (2011) 3. Ran L., et al. Comparison of robotic surgery with laparoscopy and laparotomy for treatment of endometrial cancer: a meta-analysis. PLoS ONE. 9: e108361. (2014) ^{4.} Reza M., et al. Meta-analysis of observational studies on the safety and effectiveness of robotic gynaecological surgery. British Journal of Surgery. (2010) 5. Gaia G., et al. Robotic-assisted hysterectomy for endometrial cancer compared with traditional laparoscopic and laparotomy approaches: a systematic review. Obstetrics and Gynecology. 116: 1422-1431. (2010). ^{6.} Geetha, P. and M. Nair Laparoscopic, robotic and open method of radical hysterectomy for cervical cancer: A systematic review. Journal of Minimal Access Surgery. 8: 67-73. (2012) 7. Shazly SA., et al. Robotic radical hysterectomy in early stage cervical cancer: A systematic review and meta-analysis. Gynecologic Oncology. (2015) 8. Halliday D., et al. Robotic Radical Hysterectomy: Comparison of Outcomes and Cost. Journal of Robotic Surgery 4.4 (2010): 211-16. Print. 9. Estape R., et al. A Case Matched Analysis of Robotic Radical Hysterectomy with Lymphadenectomy Compared with Laparoscopy and Laparotomy. Gynecologic Oncology 113.3 (2009): 357-61. Print.