Considering Surgery for Uterine Fibroids?

Learn about minimally invasive
***da Vinci*® Surgery**

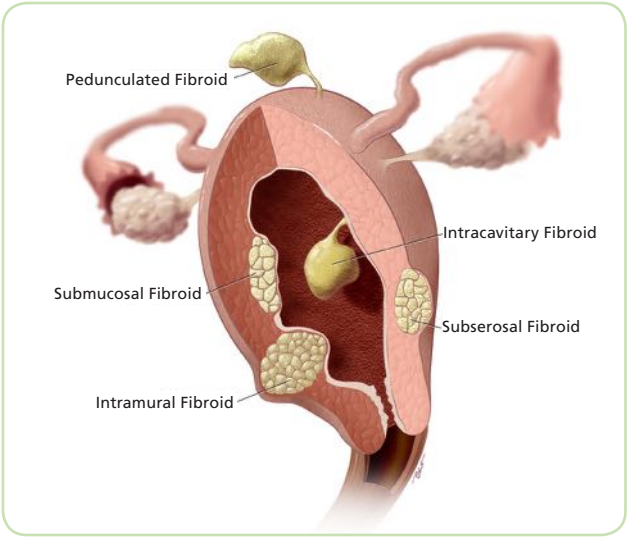
da Vinci Surgery

The Condition:

Uterine Fibroids

A uterine fibroid is a benign (non-cancerous) tumor that can grow inside and outside the uterus. Uterine fibroids are most common in women ages 30 to 40, but can occur at any age.[1] An estimated 20 to 80% of women develop fibroids by age 50.[2] Uterine fibroids are the most common reason a hysterectomy is performed.[2]

Uterine fibroids can grow as a single tumor or in clusters. They may increase in size and frequency with age, but may shrink after menopause. Not all women experience symptoms due to fibroids. When symptoms are present, they can include heavy menstrual bleeding, pelvic pain, frequent urination and difficulty getting pregnant.



Uterus shown with five types of fibroid tumors.
The tumors are named for their location relative to the uterine wall.

The Surgery:
Myomectomy

When medication, lifestyle changes and other non-invasive treatments do not ease your symptoms, your doctor may recommend surgery. Myomectomy is an alternative to hysterectomy for treating fibroids. During myomectomy, your surgeon removes the fibroid tumor(s) while leaving your uterus in place. Myomectomy is recommended for women who want to become pregnant or keep their uterus for other reasons.

Myomectomy can be performed using traditional open surgery, meaning a large incision is made in the lower abdomen. The incision must be large enough for your surgeon to fit his or her hands and

surgical instruments inside your body and reach your uterus. Open surgery allows your surgeon to see and touch your organs.

Laparoscopic surgery is a minimally invasive alternative to open surgery. With laparoscopy, doctors operate through a few small incisions with long-handled instruments and a tiny camera. The camera sends images to a monitor which guides doctors as they operate. Another minimally invasive surgical option for women considering myomectomy is *da Vinci* Surgery.

Open Surgery Incision | Laparoscopy Incisions | *da Vinci* Surgery Incisions

da Vinci Surgery:
A Minimally Invasive Surgical Option

If your doctor recommends surgery, ask about *da Vinci* Myomectomy. With *da Vinci*, surgeons operate through a few small incisions - similar to traditional laparoscopy. The *da Vinci* System features a magnified 3D HD vision system and wristed instruments that rotate far greater than the human wrist. These features enable surgeons to operate with enhanced vision, precision, dexterity and control.

As a result of *da Vinci* technology, *da Vinci* Myomectomy offers the following potential benefits over open surgery:

- Less blood loss[3,4,5]
- Shorter hospital stay[3,4,5,6]
- Less narcotic pain medicine required[6]
- Small incisions for minimal scarring

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

- Greater likelihood your surgeon can remove heavier fibroids[3]
- Fewer complications during surgery[7]

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

Potential risks of any myomectomy procedure include:

- Scar tissue
- Weakening of uterus during labor
- Pre-term birth
- Tears in uterine wall

In addition to the above risks, there are risks related to minimally invasive surgery, including *da Vinci* Myomectomy, such as hernia (bulging tissue at incision site) and pulmonary embolism (blocked lung artery).[3]

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 and to find a *da Vinci* surgeon near you, visit:
www.daVinciSurgery.com

[1] Uterine Fibroids; American College of Obstetricians and Gynecologists. Available from: http://www.acog.org/publications/patient_education/bp074.cfm. [2] Uterine Fibroids; WomensHealth.gov U.S. Department of Health and Human Services. Available from: http://www.womenshealth.gov/faq/uterine-fibroids.cfm#5 [3] Barakat EE, et al. Robotic-assisted, laparoscopic, and abdominal myomectomy: a comparison of surgical outcomes. Obstet Gynecol. 2011 Feb;117(2 Pt 1):256-65. [4] Ascher-Walsh CJ, Capes TL. Robot-assisted laparoscopic myomectomy is an improvement over laparotomy in women with a limited number of myomas. J Minim Invasive Gynecol. 2010 May-Jun;17(3):306-10. Epub 2010 Mar 19. [5] Sangha R, et al. Surgical outcomes for robotic-assisted laparoscopic myomectomy compared to abdominal myomectomy. Journal of Robotic Surgery, Volume 4, Number 4, December 2010 , pp. 229-233(5). [6] Nash K, et al. Robotic-assisted laparoscopic myomectomy versus abdominal myomectomy: a comparative analysis of surgical outcomes and costs. Arch Gynecol Obstet. 2012 Feb;285(2):435-40. Epub 2011 Jul 22. [7] Bedient CE, et al. Comparison of robotic and laparoscopic myomectomy. Am J Obstet Gynecol. 2009 Dec;201(6):566.e1-5. Epub 2009 Aug 15.

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.