

ROBOT-ASSISTED SURGERY

Implications for Women's Health

While no woman wants to face surgery, today the vast majority of complex gynecologic conditions - from [endometriosis](#) to [uterine fibroids](#), [heavy periods](#) to [cancer](#) - can now be treated effectively without a big incision. *da Vinci* Surgery only requires a few tiny incisions, so patients can get back to life faster - within days rather than the usual weeks required with traditional surgery.

The *da Vinci*® Surgical System allows Swedish Medical Center surgeons to operate with unsurpassed 3D HD visualization, dexterity, surgical precision, control and ergonomic comfort. The result is what potentially may be better surgery, with more patients that are now candidates for a minimally invasive approach.

Why is *da Vinci* Surgery important to women?

- Hysterectomy is the most common female surgery: In fact, one in three women in the United States will have a hysterectomy before she turns 60.¹ This procedure is performed for a variety of conditions, including excessive bleeding, fibroids, endometriosis, uterine prolapse, cancer and pre-cancer. Currently, the vast majority of hysterectomies are still performed via open incision.^{2,3}
- In addition, there are roughly 60,000 myomectomy (fibroid removal) procedures performed annually in the U.S., a vast majority of which are still performed via a large open incision.³ Similarly, it's estimated that more than 200,000 procedures are performed in the U.S. annually to treat severe uterine prolapse or vaginal vault prolapse, the vast majority of which are surgically corrected through an open incision.^{4,5}
- Endometrial (uterine) cancer is the most common gynecologic cancer in the U.S, and it affects 42,100 women each year. The standard treatment for uterine cancer is removal of the uterus, ovaries and tubes along with removal of the pelvic and periaortic nodes which lie along the body's major blood vessels. This complex and delicate procedure has traditionally been performed through a vertical incision spanning the distance between a woman's pubic bone to just above the umbilicus.
- Cervical cancer results from a mutation in the cellular lining of the cervix, which spreads via mitosis to normal tissues and organs. Should this abnormal cell division go undetected and/or untreated, tumors will form and extensive spreading of the cancer (metastasis) will likely occur. In 2009 approximately 11,000 new cases are expected to be diagnosed and 4,000 women will die from the disease.

Traditional open gynecologic surgery, using a large incision for access to the uterus and surrounding anatomy, has for many years been the standard approach to many gynecologic procedures. Yet, open surgery can cause significant pain, physical trauma and a long recovery process. For women facing gynecologic surgery, the period of pain, discomfort and extended time away from normal daily activities that usually follows traditional surgery can also cause significant anxiety.

For most women, *da Vinci* Surgery at Swedish offers numerous potential benefits over traditional open surgery, including:

- Significantly less pain⁶
- Less blood loss and need for transfusion^{6,7}
- Fewer complications^{6,7}
- Shorter hospital stay^{6,7}
- Quicker recovery and return to normal activities⁷
- Small incisions for minimal scarring
- Better outcomes and patient satisfaction, in many cases⁶

Surpassing the limits of conventional laparoscopic surgery, *da Vinci* is revolutionizing gynecologic surgery for women.

¹U.S. Department of Health and Human Services. www.womenshealth.gov/fag/hysterectomy.htm. 8/22/2008

²Wilcox LS, Koonin LM, Pokras R, Strauss LT, Xia Z, Peterson HB. Hysterectomy in the United States, 1988-1990. *Obstet Gynecol*. 1994 Apr;83(4):549-55

³Mack MJ. Minimally Invasive and Robotic Surgery. *JAMA*. 2001 Feb; 285:568-572

⁴Boyles SH, Weber AM, Meyn L. Procedures for pelvic organ prolapse in the United States, 1979-1997. *Am J Obstet Gynecol*. 2003 Jan;188(1):108-15

⁵Worcester S. Repairing post-hysterectomy vaginal vault prolapse: little data available. *International Medical News Group*. 11/1/2003

⁶Boggess JF. Robotic surgery in gynecologic oncology: evolution of a new surgical paradigm. *J Robotic Surg* (2007) 1:31-3

⁷Payne TN, Dauterive FR. A comparison of total laparoscopic hysterectomy to robotically assisted hysterectomy: surgical outcomes in a community practice. *J Minim Invasive Gynecol*. 2008 May-June;15(3):28