Facing Surgery for Gynaecologic conditions?

Consider the minimally invasive da Vinci® Surgery and learn more about why this could be your best option





The Conditions:

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

Common benign (non-cancerous) conditions are:

- Tissue growths in and/or around the uterus
- Tissues of the uterine lining growing outside the uterus or into the wall of the uterus
- Slipping of the uterus, vagina and/or bladder from the pelvic wall

Indications may vary but these conditions may cause chronic pain, heavy bleeding and other mild to severe symptoms.

The Surgeries:

HYSTERECTOMY

Hysterectomy is the surgical removal of the uterus and can be removed via a vaginal hysterectomy, abdominal hysterectomy or by minimally invasive procedures like laparoscopy or *da Vinci*® robotic surgery.

A vaginal hysterectomy is done through a cut in your vagina. The surgeon takes the uterus out through this incision and closes it with stitches.

With an abdominal hysterectomy, the surgeon removes the uterus through a large open incision. The incision must be large enough for the surgeon to fit his or her hands inside the body.

MYOMECTOMY

A uterine fibroid is a benign (non-cancerous) tumor that grows in the uterine lining, inside, and/or outside of the uterus.

Myomectomy is an alternative to hysterectomy for treating fibroids and is recommended for women who want to become pregnant or preserve their uterus for other reasons.

Uterine fibroids are most common in women ages 30 to 40, but can occur at any age. An estimated 20 to 80% of women develop fibroids by age 50.

A woman can have one fibroid tumor or several. Fibroids may increase in size and frequency with age, but may shrink after menopause.



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

Not all women experience symptoms due to fibroids while some may experience heavy menstrual bleeding, pelvic pain, frequent urination and difficulty in getting pregnant.

When medication, lifestyle changes and other non-invasive treatments do not help ease symptoms, surgery may be recommended.

During myomectomy, the fibroid tumor(s) are removed while leaving the uterus in place.

Myomectomy can be performed using traditional open surgery or minimally invasive surgery like laparoscopy or *da Vinci*® robotic surgery.

ENDOMETRIOSIS RESECTION

Endometriosis is a condition in which the tissue that lines the uterus (the endometrium) also grows outside the uterus. This tissue is called implants or lesions, and is usually found in the pelvic area but in rare cases, develops in other parts of the body. Normally, the endometrium sheds during monthly periods, but implants stay in place.

Endometriosis is usually diagnosed between ages 25 to 35 but can occur anytime - from menstruation through menopause.

Family history plays an important role in endometriosis. A woman who has a mother or sister with endometriosis is six times more likely to develop the condition.

Many women have no symptoms, but endometrial implants can cause irregular bleeding, infertility and pain - including pain during periods, intercourse, bowel movements, and pain associated in the lower back or abdomen.

Superficial, ovarian, and deep infiltrating endometriosis can be treated with surgical resection.

Endometriosis resection involves removing all visible implants while leaving the uterus and other organs in place.

It is usually recommended for women who want to get pregnant in the future and can be performed using traditional open surgery or minimally invasive procedures like laparoscopy or *da Vinci*® robotic surgery.

SACROCOLPOPEXY

Pelvic prolapse is a condition that occurs when muscles and ligaments supporting the pelvic organs weaken. As a result, these organs (uterus, vagina, cervix, bladder, urethra, or rectum) slip from their normal position.

Severe uterine prolapse can cause the uterus to slip partially into the vagina. It may cause the upper part of the vagina to sag into the vaginal canal or even outside the vagina.







Normal Anatomy

Uterine Prolapse

Vaginal Prolapse

Some women with prolapse have no symptoms while others may experience a feeling of sitting on a ball, a pull in the pelvis, pelvic or abdominal pain, painful intercourse, protrusion of tissue from the vagina, bladder infections, vaginal bleeding, unusual discharge, constipation or frequent urination.

Risk factors for prolapse include multiple vaginal deliveries, age, obesity, hysterectomy and smoking.

In Sacrocolpopexy a surgical mesh is used to hold the affected pelvic organ(s) in their natural position. The mesh remains in place permanently.

Sacrocolpopexy is considered the most effective way to correct pelvic prolapse and resolve symptoms. It may also be performed following a hysterectomy to provide long-term support for the vagina.

Robotic-assisted Sacrocolpopexy provides an alternative to the abdominal approach and conventional laparoscopy. It is a means to more effectively and efficiently dissect these spaces and suture while providing a minimally invasive modality with faster recovery time.

OVARIAN CYSTECTOMY

Ovary by nature is a partially cystic structure. Most ovarian cysts develop as a consequence of disordered ovulation in which the follicle fails to release the oocyte. The follicular cells continue to secrete fluid and expand the follicle, which over time can become cystic. Ovarian cysts are quite common and involve all age groups.

The da Vinci® Surgical System allows for minimally invasive procedures to remove ovarian cysts and masses.

da Vinci® in Early Stage Gynaecologic Cancer

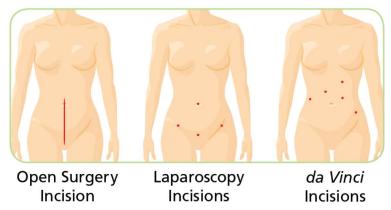
A variety of gynaecologic cancers can affect the reproductive system, which consists of the uterus, vagina, ovaries and fallopian tubes. The most common types are: cervical, endometrial (uterine) and ovarian cancer. Each gynaecologic cancer is unique and has different signs, symptoms and risk factors.

Hysterectomy (removal of the uterus) is most often recommended in cancer of the uterus or cervix. The type of hysterectomy depends upon the 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 to fit the surgeon's hands and instruments inside the body.

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 some 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.

The most advanced option for a minimally invasive hysterectomy is the *da Vinci*® robotic Surgery.



The da Vinci® Hysterectomy:

As a result of this technology, *da Vinci* [®] Hysterectomy offers the following potential benefits compared over traditional open surgery and laparoscopic surgery:

- > More precise removal of cancerous tissue
- Fewer complications
- Less blood loss
- Less pain
- Shorter hospital stay (one day in many cases)
- Quicker recovery
- Minimal scarring
- > Less need for narcotic pain medicine

The EnablingTechnology: 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 some tiny

instruments inside your body. These features enables your doctor to operate with enhanced vision, precision, dexterity and control.

Though it is **often** called a "robot," da Vinci ^{*} cannot act on its own. Surgery is performed entirely by your doctor. To gether, da Vinci technology allows your doctor to perform routine and complex procedures through just a few small openings, similar to traditional lapa roscopy.

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

da Vinci - changing the experience of surgery for people around the world.

Important Information for Patients

Serious complications may occur in any surgery, including da **Vinci**® Surgery, up to and including death. 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.

For more information, visit: www.davincisurgery.com www.intuitivesurgical.com

www.vattikutitechnologies.com

