



Gynecologic Patient Education Seminar

Know your options

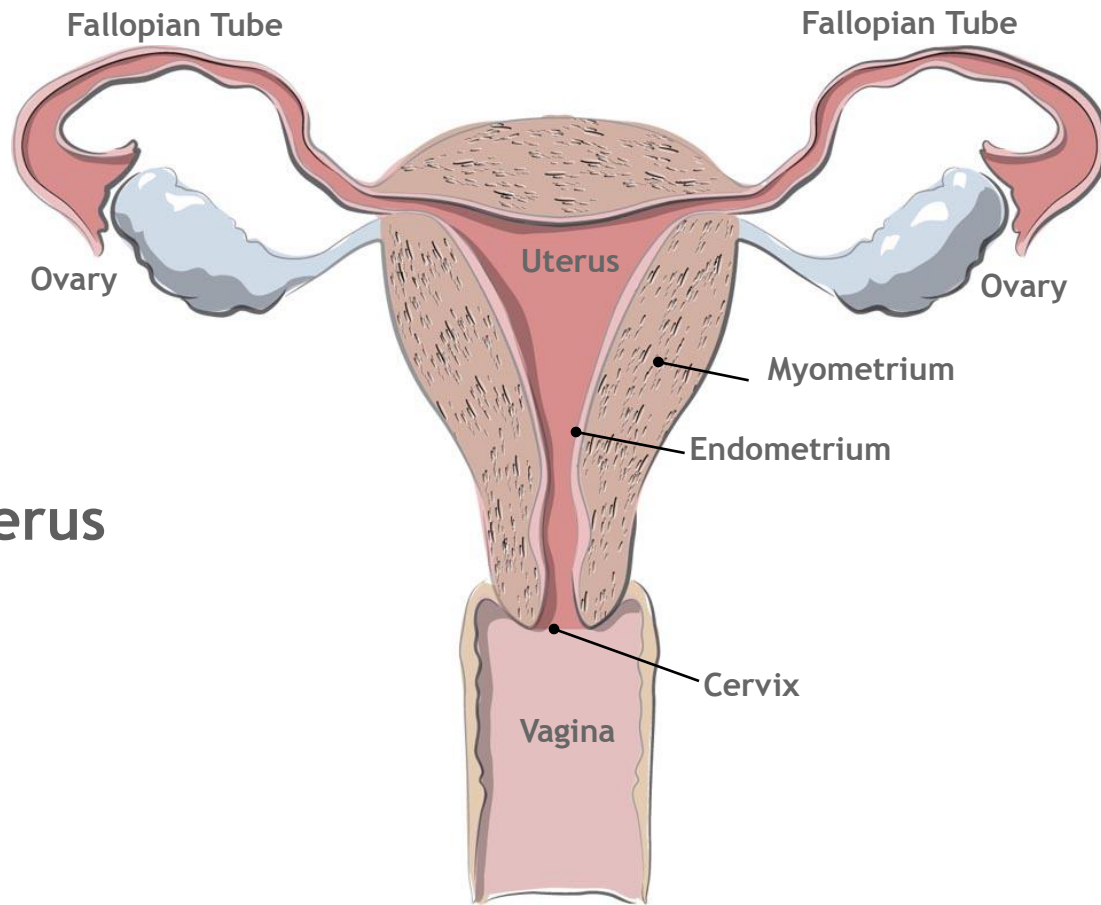
This program presents the opinions of and techniques used by an independent surgeon and not those of Intuitive Surgical. While clinical studies support the effectiveness of the da Vinci® System when used in minimally invasive surgery, individual results may vary. Please see last slide for complete disclosures.

Program

- **Gynecologic Conditions**
 - Benign
 - Cancerous
- **Symptoms & Treatments**
- **Surgical Options**
- ***da Vinci*® Gynecologic Surgery**
 - ✓ *da Vinci*® Hysterectomy
 - ✓ *da Vinci*® Myomectomy
 - ✓ *da Vinci*® Hysterectomy for Cancer

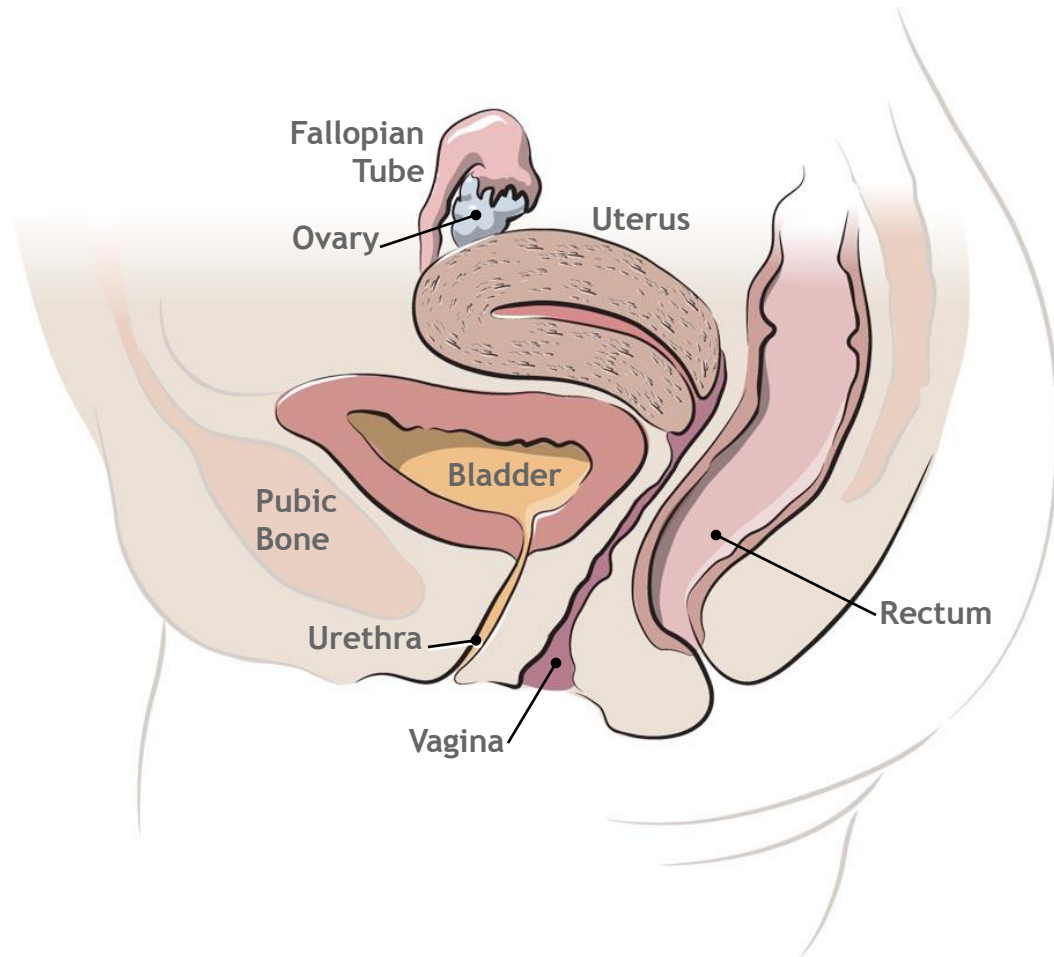
The Uterus & Reproductive Organs

- Uterus (womb)
 - Endometrium
 - Myometrium
- Fallopian tubes
- Ovaries — contain eggs
- Cervix — opening of uterus
- Vagina — birth canal



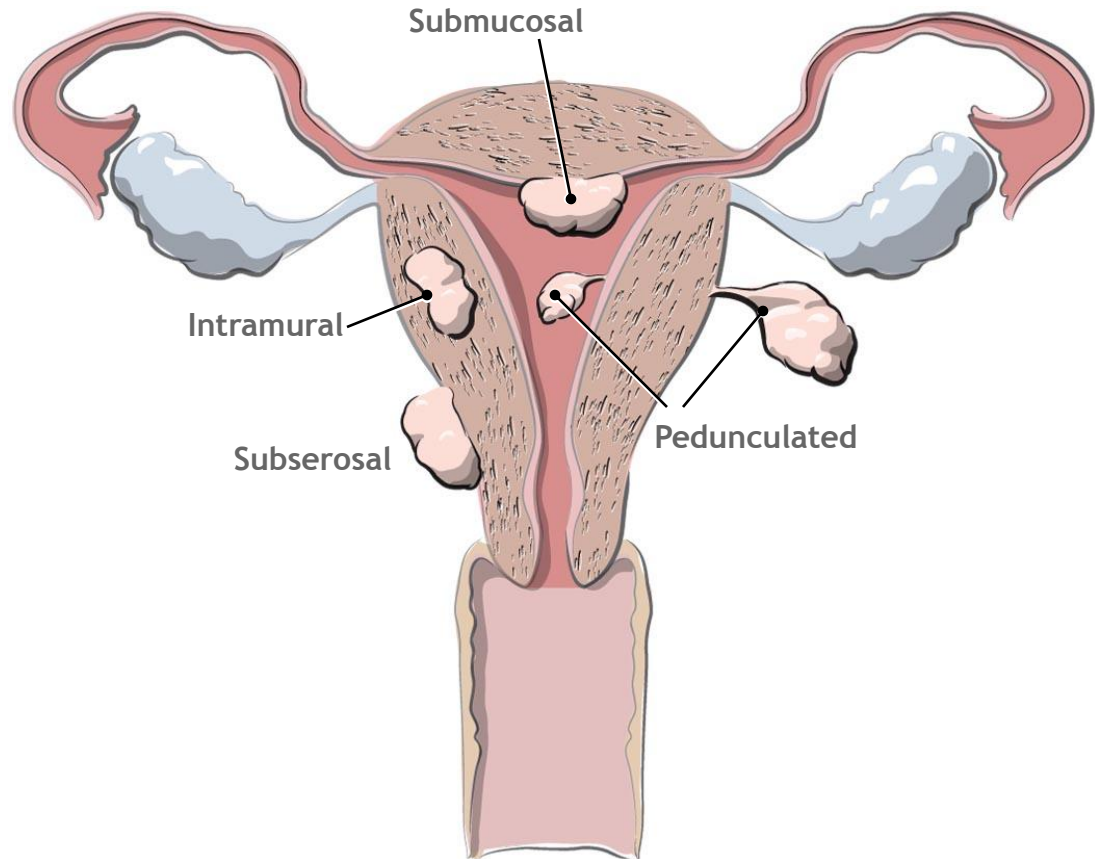
Gynecologic Conditions

- Fibroids
- Pelvic masses
- Abnormal bleeding
- Endometriosis
- Pelvic floor disorders
- Pre-cancer
- Cancer

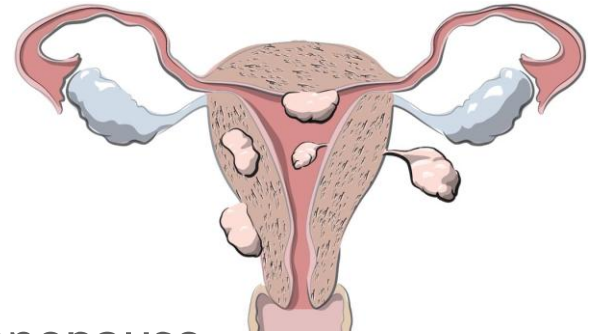


What are Fibroids?

- Common
- Benign tumors
 - ✓ Vary by size & location
- Symptoms
 - ✓ Bleeding
 - ✓ Can cause infertility
 - ✓ Urinary frequency or constipation
 - ✓ Pressure & pain



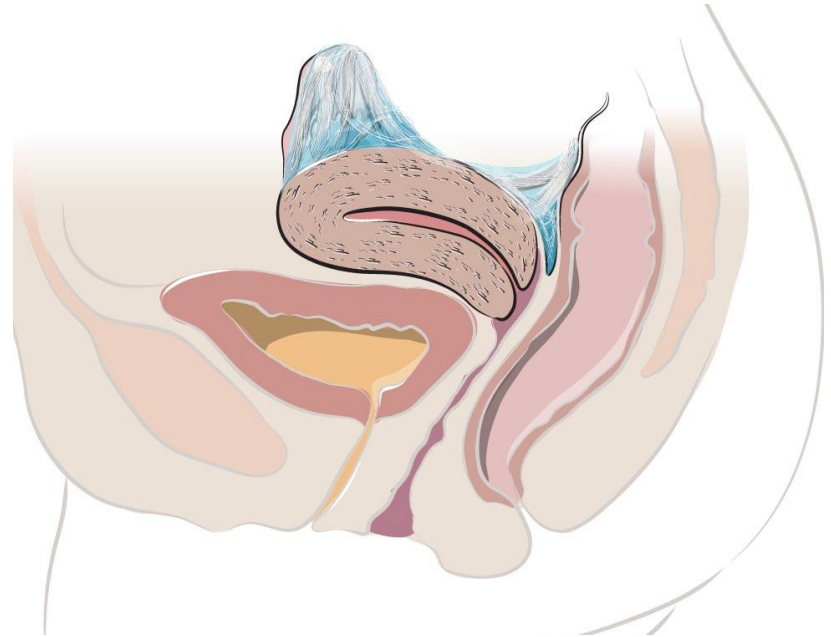
Treatment Options for Fibroids



- **Conservative management**
 - If fibroids are not symptomatic
- **Shrink fibroids**
 - Medications (GnRH agonists) induce menopause
 - Uterine artery embolization (UAE) stops blood flow to fibroid
- **Surgical Options**
 - Resection
 - ✓ To remove fibroids inside uterus (submucosal) only
 - Myomectomy
 - ✓ To remove intramural or subserosal fibroids
 - ✓ If uterine and/or fertility preservation desired by patient
 - Hysterectomy
 - ✓ Removal of uterus

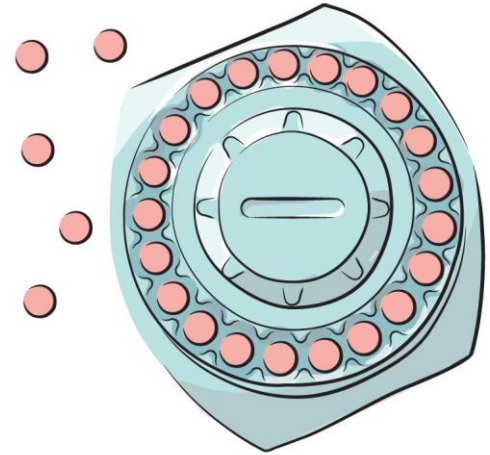
What is Endometriosis?

- Growth of endometrial tissue outside the uterus
- Symptoms
 - ✓ Pain before/after periods
 - ✓ Chronic pelvic pain
 - ✓ Painful bowel movements during periods
 - ✓ Pain during/after intercourse
 - ✓ Infertility
 - ✓ Irregular vaginal bleeding



Treatment Options for Endometriosis

- Pain Management
 - Oral contraceptives
 - Pain medications, such as ibuprofen
- Medical Therapy
 - GnRH agonists
- Surgical Options
 - Resection
 - Ablation
 - Hysterectomy

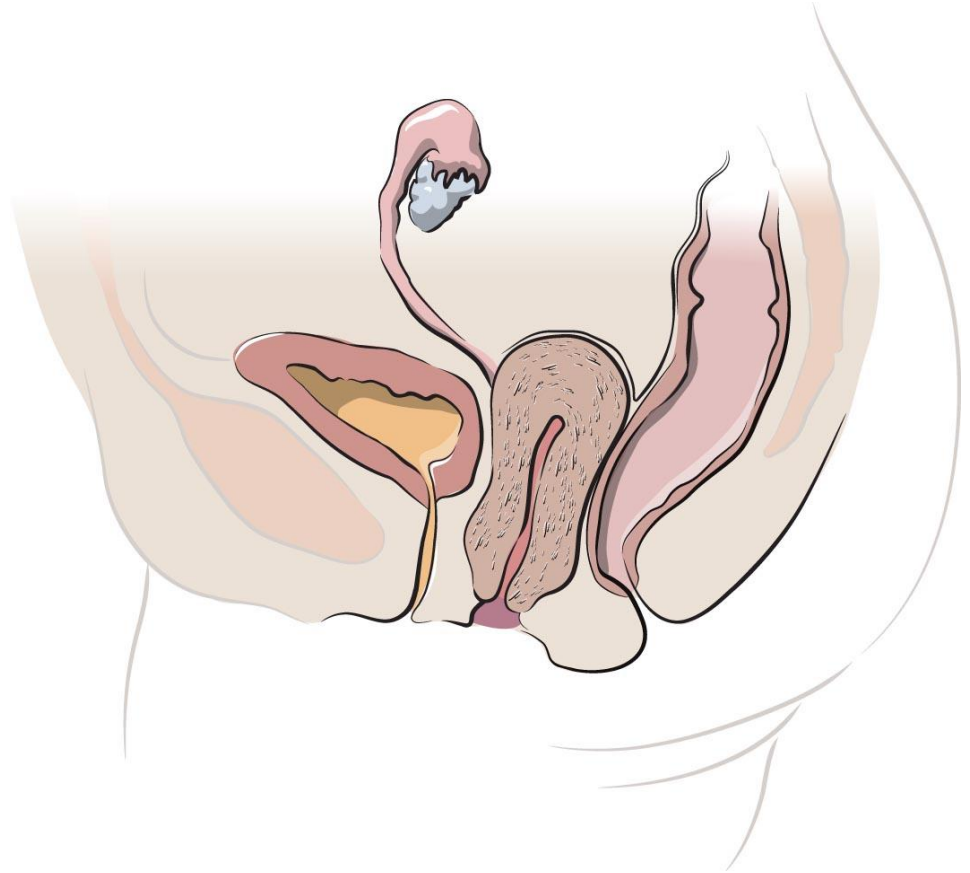


What are Pelvic Floor Disorders?

Prolapsed bladder, vagina, uterus, rectum

Example: Prolapsed uterus

Uterus drops from normal position in pelvic cavity & descends into & sometimes outside of vagina



What are Symptoms of Pelvic Floor Disorders?

- **Symptoms of pelvic floor disorders**
 - ✓ Pelvic heaviness or fullness
 - ✓ Feeling that something is falling out
 - ✓ Pain during intercourse
 - ✓ Anal pain or pressure
 - ✓ Low back pain
 - ✓ Incontinence or difficulty urinating

Treatment Options for Pelvic Floor Disorders

- Pelvic floor exercises
- Vaginal pessary
- Surgical Options
 - Hysterectomy for uterine prolapse
 - Vaginal vault suspension for vaginal prolapse
 - ✓ Vaginal
 - ✓ Abdominal
 - ✓ Laparoscopic
 - ✓ *da Vinci*®
 - Bladder suspension for bladder prolapse

What is Pre-Cancer?

- Common Condition
 - Screening to prevent cancer from occurring
- Abnormal cells
 - Cervix (called dysplasia)
 - Endometrial lining (called hyperplasia)
- Symptoms
 - Looking for abnormal cells that could predict future risk of cancer
 - Cervix (dysplasia) is asymptomatic
 - ✓ Diagnosed by PAP smear
 - Endometrial lining (hyperplasia) often cause abnormal bleeding
 - ✓ Diagnosed by office biopsy or D&C procedure

Pre-Cancer

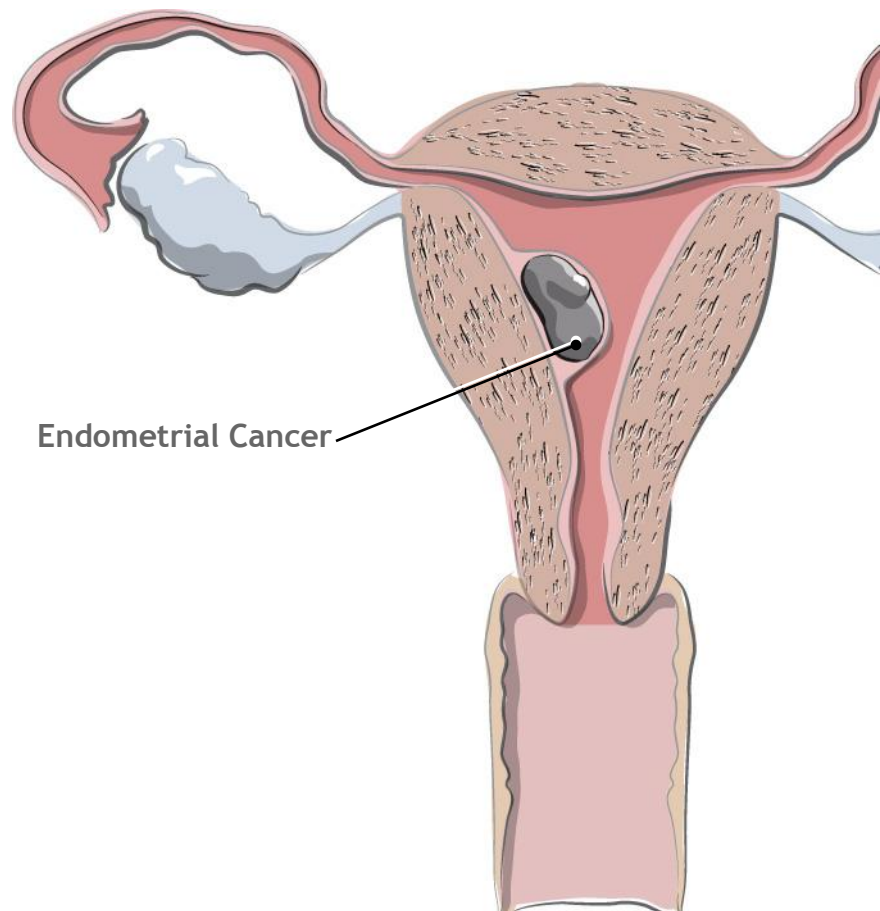
- Treatment options
 - Cervix dysplasia often treated by removing part of the cervix
 - ✓ LEEP or cervical cone biopsy
 - Endometrial hyperplasia treated by hysterectomy
 - ✓ Hormonal treatment is an experimental, short-term option

Cancer of the Female Reproductive Organs

- These cancers are very uncommon
- Symptoms
 - ✓ Intermittent bleeding or spotting
 - ✓ Irregular periods (prolonged or more frequent)
 - ✓ Bleeding after menopause
 - ✓ Pink, watery, or bloody vaginal discharge
 - ✓ Pelvic discomfort or pain
 - ✓ Bleeding with intercourse
 - ✓ Irregular bowel/bladder function
 - ✓ Abdominal pressure, bloating

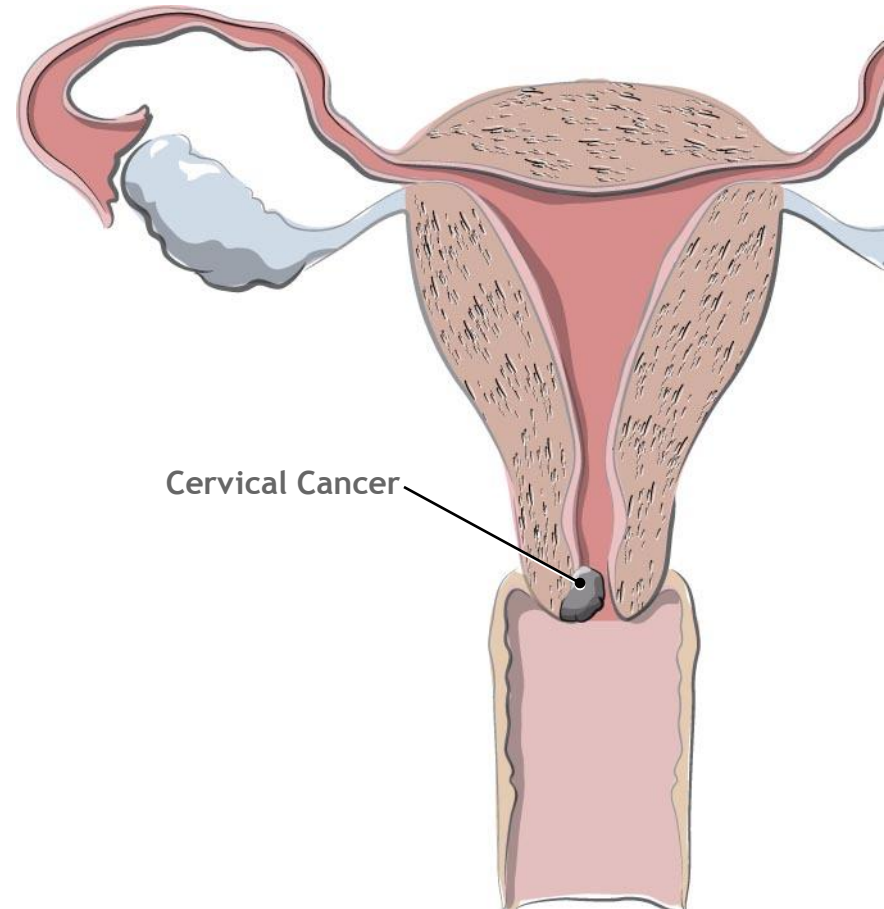
Endometrial Cancer

- The most common gynecologic cancer
- Usually detected in an early stage
- Commonly causes post-menopausal bleeding
- Almost always treated with surgery



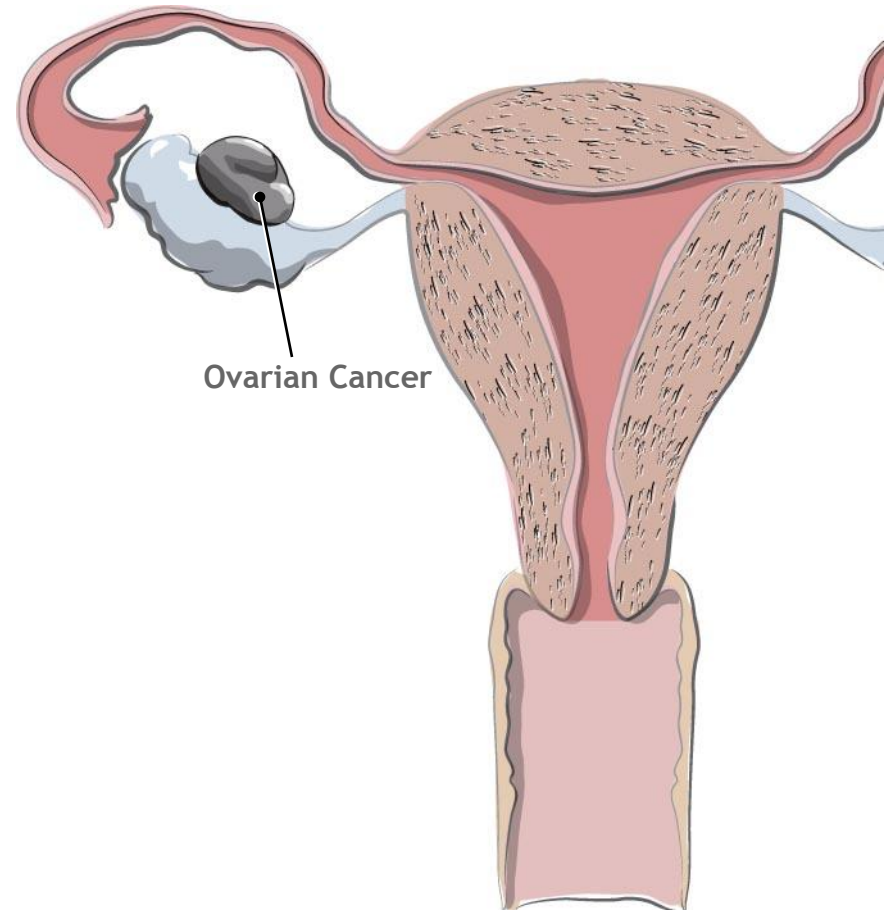
Cervical Cancer

- Can be detected by an abnormal PAP smear
- Symptoms include abnormal bleeding, discharge, or bleeding after intercourse
- Early stages usually treated with surgery
- Advanced stages treated with radiation/chemotherapy



Ovarian Cancer

- Sometimes known as the “silent killer”
- Early cases are often curable
- Most women are diagnosed with advanced disease
- There is no screening test for ovarian cancer



Treatment Options for Cancer

■ Surgical Options

- Remove cervix & leave uterus intact (trachelectomy)
 - ✓ Early-stage cervical cancer
- Radical hysterectomy with pelvic lymph node removal
 - ✓ Cervical cancer
- Hysterectomy with removal of ovaries, fallopian tubes and pelvic & para-aortic lymph nodes
 - ✓ Endometrial cancer
 - ✓ Additional tissues biopsied & removed for ovarian cancer

■ Radiation/chemotherapy

- Appropriate for advanced stage cancers

Hysterectomy Facts

- Most common female surgery
- Definitive solution for many uterine conditions
- 650,000 procedures annually
 - ✓ Most performed through abdominal (open) incision
- Advances in minimally invasive surgery (MIS) for hysterectomy
 - ✓ More GYN surgeons performing MIS for hysterectomy

Myomectomy Facts

- 40,000 procedures performed annually
 - ✓ Most performed through abdominal (open) incision
- Number and size of fibroids may require complete removal of uterus (hysterectomy)
- Advances in minimally invasive surgery (MIS) for myomectomy
 - ✓ More GYN surgeons performing MIS for myomectomy
 - ✓ If uterine and/or fertility preservation is desired

Surgical Approaches to Hysterectomy

- Open (abdominal) surgery
- Minimally invasive surgery (MIS)
 - ✓ Vaginal surgery
 - ✓ Conventional laparoscopic surgery
 - ✓ *da Vinci*® Hysterectomy (robot-assisted surgery)

Minimally Invasive Surgery (MIS)



Circa. 1991

- Reduced blood loss
- Fewer complications
- Shorter Hospital stay
- Faster recovery
- Less scarring

Vaginal Surgery

Pros

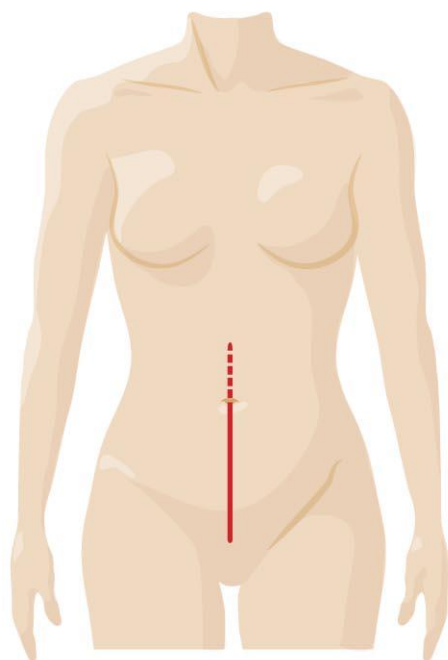
- Minimally invasive
 - ✓ Minimal scarring
 - ✓ Short hospital stay
 - ✓ Less pain compared to abdominal hysterectomy

Cons

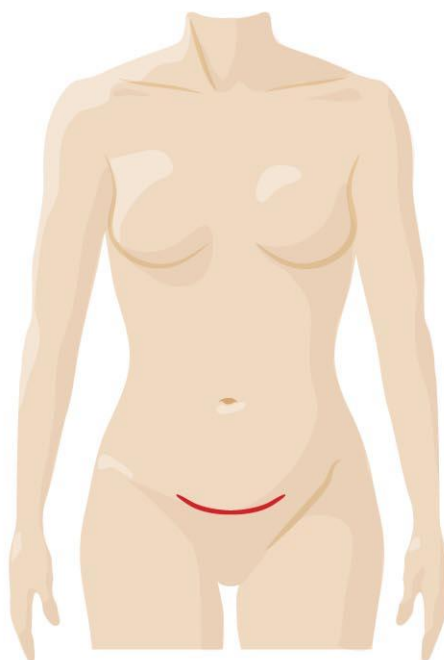
- Difficult to perform
- Reduced visualization
- Not indicated for many patients
 - ✓ Nulliparous (women who have not given birth)
 - ✓ Multiple fibroids (or large masses)
 - ✓ Cancer
 - ✓ Adhesions, e.g., endometriosis, prior pelvic surgery

Laparoscopic Surgery

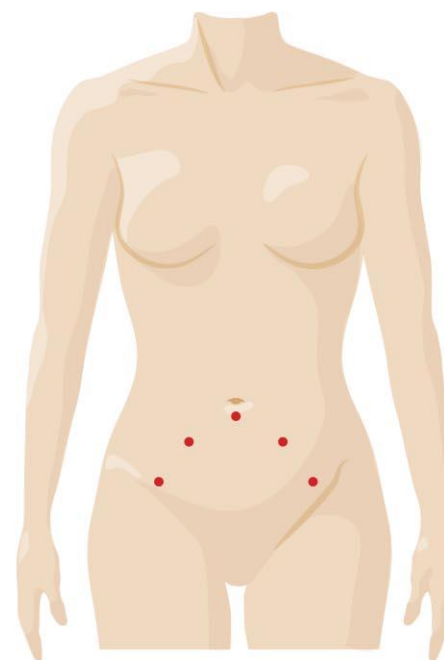
- **Minimally invasive**
 - ✓ Ability to operate through small, keyhole incisions
- **Better visualization than open surgery**



Open Vertical Incision



Open Transverse Incision



Laparoscopic or
da Vinci® Incision

Drawbacks with Conventional Laparoscopic Surgery

- Surgeon operates from a 2D image
- Rigid instruments
- Instruments controlled at a distance
- Reduced dexterity, precision & control
- Greater surgeon fatigue
- Surgical assistance is limited
- Makes complex operations more difficult to perform

How can we overcome these drawbacks?



da Vinci® Surgical System

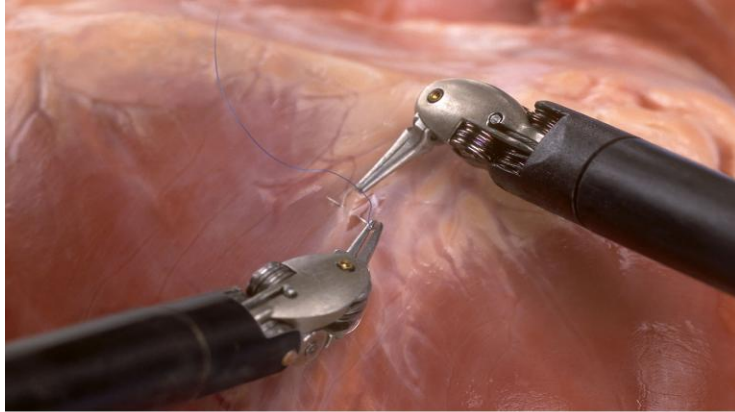
- State-of-the-art robotic technology
- Surgeon in control
- Assistant has direct access

Vision System



Surgeon immersed in
3D image of the
surgical field

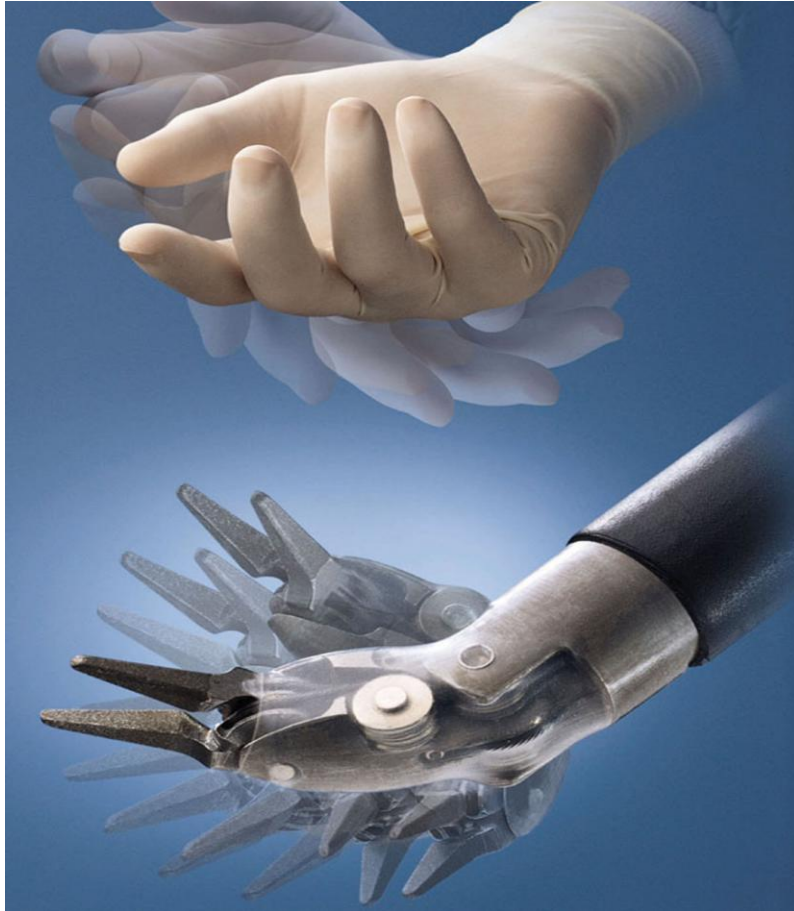
The Surgeon Directs the Instruments



Surgeon directs precise movements of the instruments using Console controls



Wrist and Finger Movement

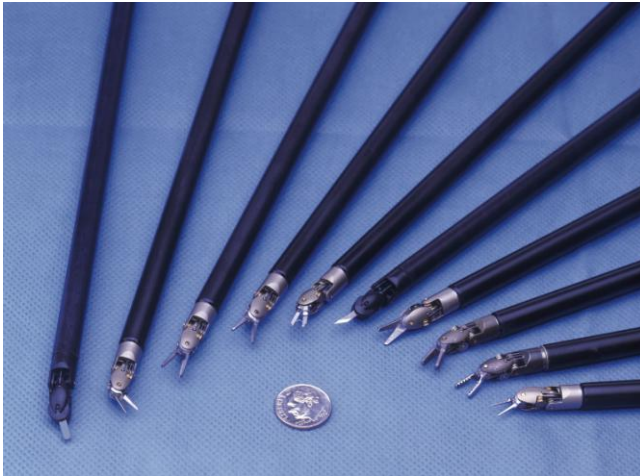


- Conventional minimally invasive instruments are rigid with no wrists
- *EndoWrist*® Instrument tips move like a human wrist
- Allows surgeon to operate with increased dexterity & precision

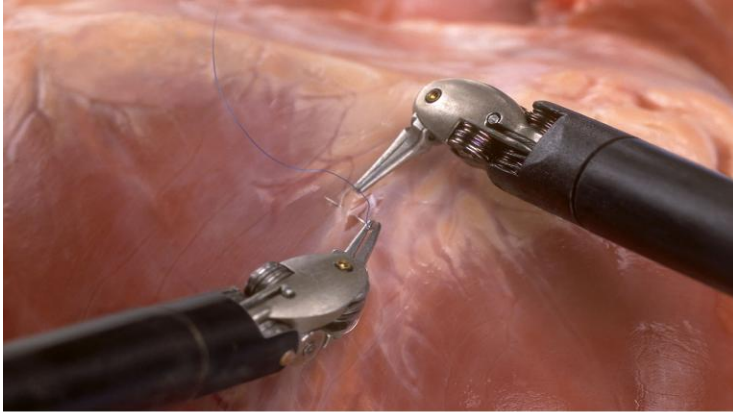
Small Instruments, Small Incisions



- *EndoWrist*® Instruments fit through dime-sized incisions
- A wide range of instruments are available



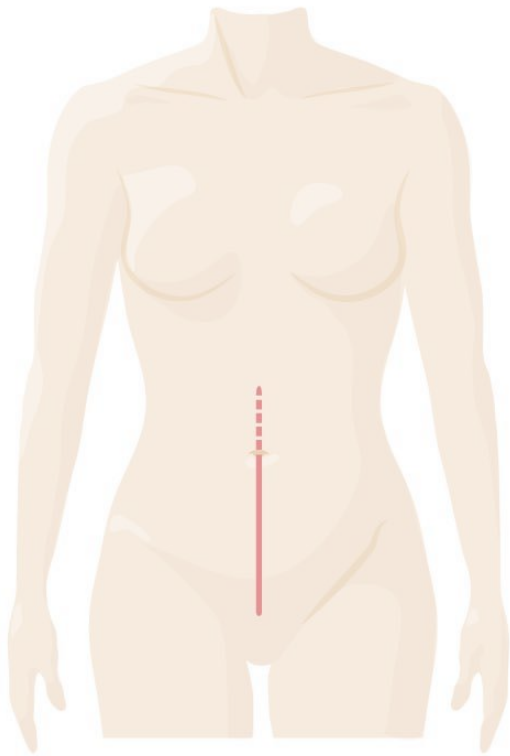
da Vinci® Surgery



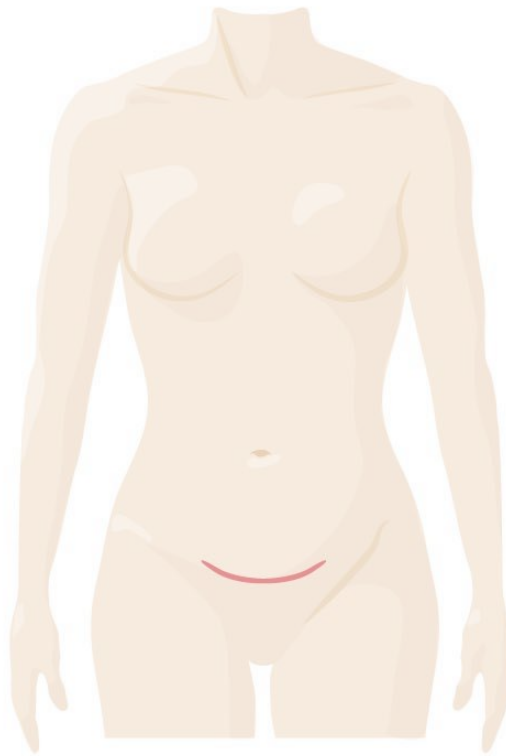
Surgeon has...

- Improved visualization
- Better instrumentation, surgical control & precision
- Better surgical dexterity for complex aspects of procedure
- Easier & faster suturing
- Better ergonomics

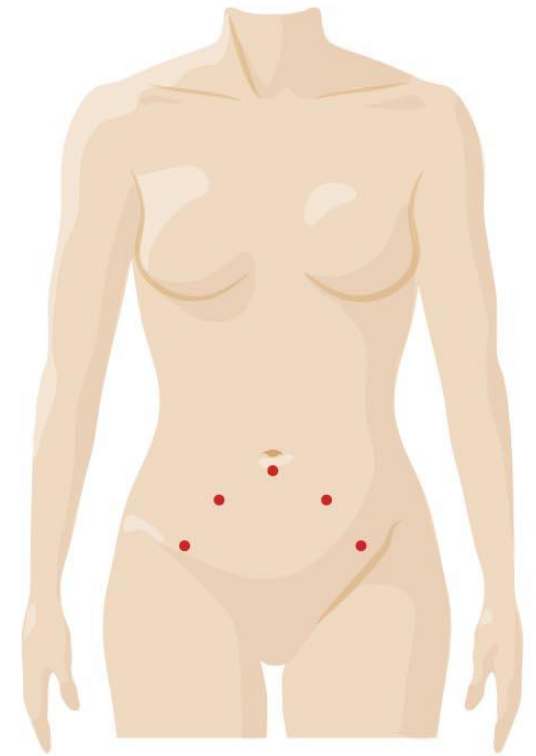
Robot-Assisted Surgery Access



Open Vertical Incision



Open Transverse Incision



da Vinci® Surgical Incision

Potential Patient Benefits

Benefit	Open Surgery	<i>da Vinci</i> ® Surgery
Incision size	Long incision with visible scarring	4-6 dime-sized incisions with minimal scarring
Pain or discomfort	Weeks	Days
Hospital stay	3-5 days	1-2 days
Recovery	4-6 weeks	1-3 weeks
Return to normal activities	Weeks	Days

da Vinci® Gynecologic Surgery Indications

- *da Vinci*® Surgery appropriate for a broader range of gynecologic conditions & patient situations compared to conventional laparoscopy
 - **Cervical cancer**
 - ✓ Conventional laparoscopy not widely accepted
 - **Endometrial cancer**
 - ✓ Conventional laparoscopy accepted, but technically difficult to perform
 - **Vaginal or uterine prolapse**
 - ✓ Conventional laparoscopic suturing not reliable
 - **Endometriosis**
 - **Uterine fibroids**
 - **Obese patients**

Goals of *da Vinci*® Hysterectomy

- **Enable minimally invasive surgery (MIS) approach**
 - Easier to learn & perform compared to conventional laparoscopic surgery
 - *da Vinci* (robotic-assisted) Surgery will enable:
 - ✓ More Gynecologists to perform minimally invasive surgery
 - ✓ Gynecologists to perform more advanced operations & more types of procedures using a minimally invasive approach
- **Provide benefits of MIS to hysterectomy candidates**
 - Short hospital stay
 - Minimal pain & scarring
 - Quick recovery & return to normal activities

Goals of *da Vinci*® Myomectomy

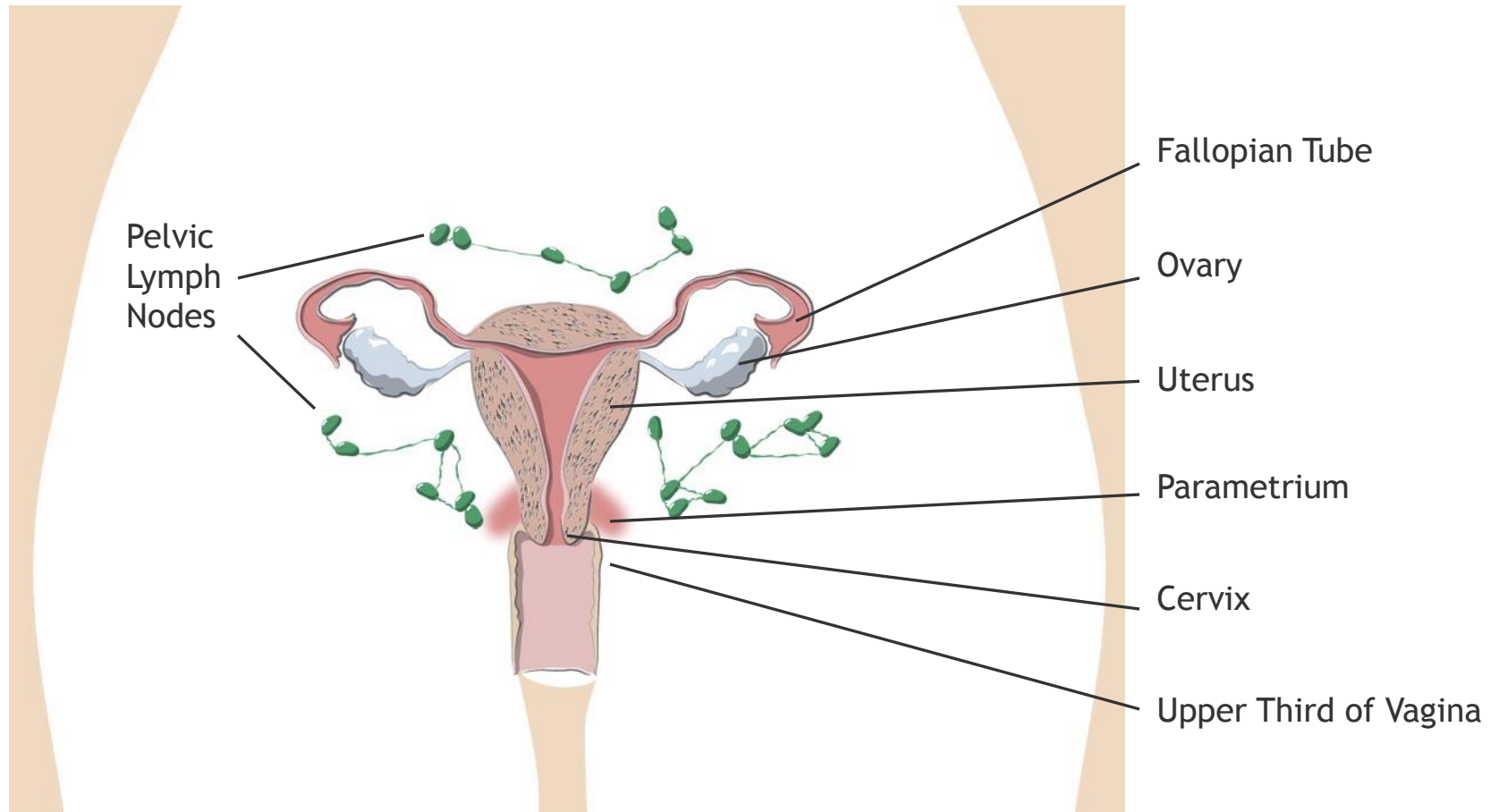
- **Enable minimally invasive surgery (MIS) approach**
 - ✓ Most myomectomies performed through open incision
 - ✓ Conventional laparoscopy for myomectomy is very difficult to learn & perform
- **Enable women to retain their uterus***
- **Provide means for women to preserve their fertility**
- **Provide benefits of MIS to myomectomy patients**
 - Short hospital stay
 - Minimal pain & scarring
 - Quick recovery & return to normal activities

**Assumes patient is a candidate for myomectomy.*

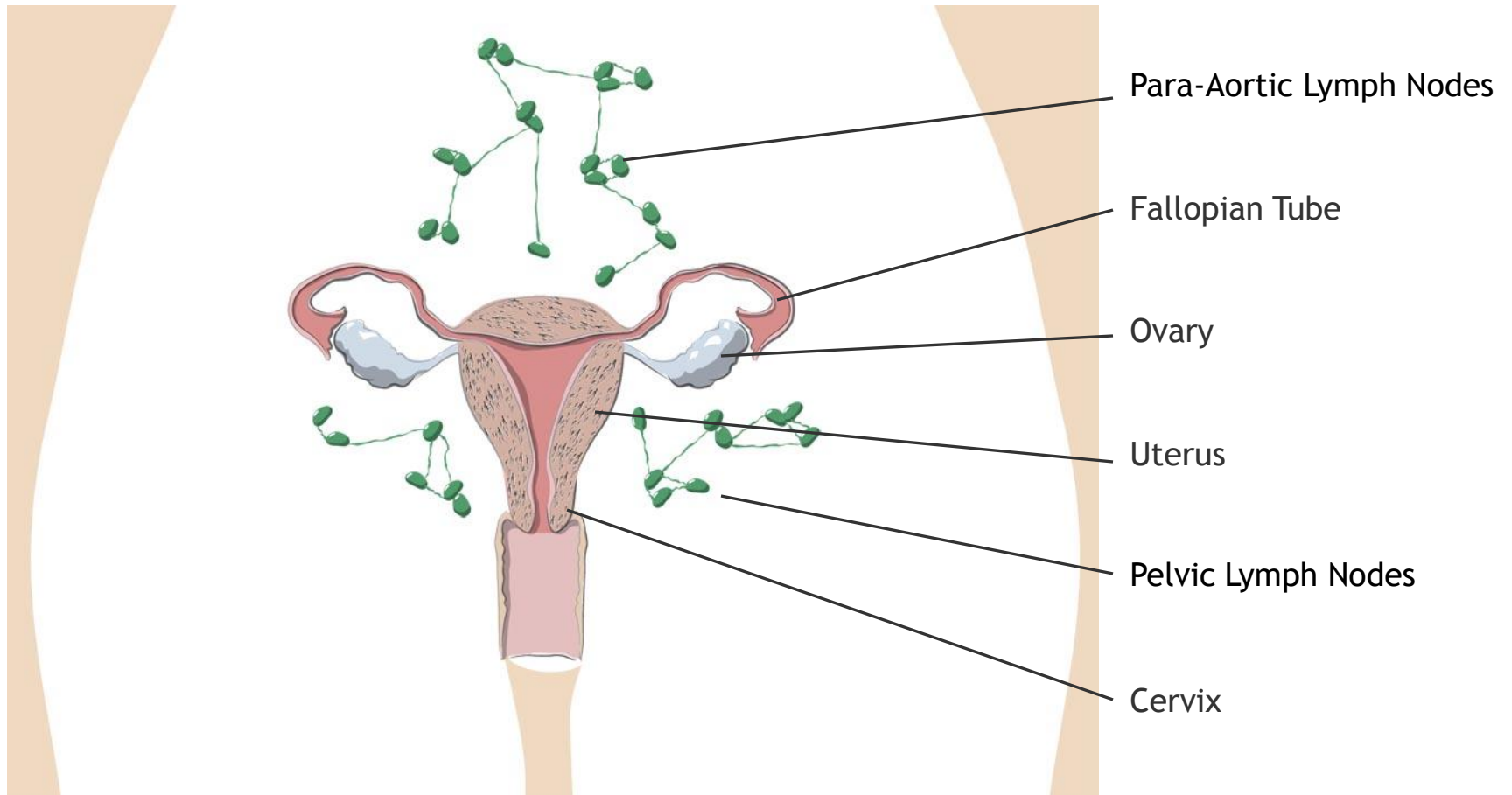
Goals of *da Vinci*® Gynecologic Cancer Surgery

- Traditional open approach resulted in large incisions
- *da Vinci* enables minimally invasive surgery (MIS) approach
 - Conventional laparoscopy may fall short in adequately removing & treating gynecologic cancers
 - Conventional laparoscopic (minimally invasive) surgery is difficult to learn & perform
 - **With *da Vinci*, Gynecologic Oncologists can perform more advanced operations using a minimally invasive approach**
- Provide benefits of MIS to cancer patients
 - Short hospital stay
 - Minimal pain & scarring
 - Quick recovery & return to normal activities

Radical Hysterectomy for Cervical Cancer

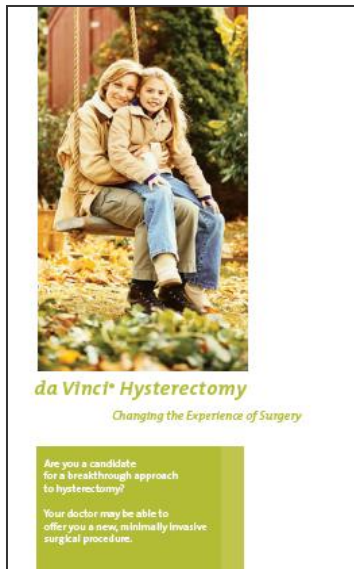


Surgical Staging for Endometrial Cancer

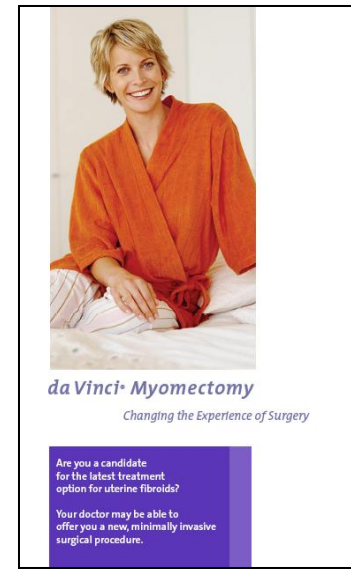


Patient Information

- **da Vinci® Hysterectomy**
educational brochure



- **da Vinci® Myomectomy**
educational brochure



Frequently asked questions

What physical limitations will I have after the operation and when will I be able to resume activities such as working, driving and exercise?

Frequently asked questions

Is this a standard operation?

How safe is *da Vinci* Gynecologic Surgery?

Frequently asked questions

Isn't open surgery safer for many patients?

Frequently asked questions

How soon can I expect to be able to have sexual relations after surgery?

Summary

- *da Vinci*® Surgery is rapidly becoming the most effective, least invasive surgical option for patients
 - ✓ For more information on *da Vinci*® Surgery, visit www.davincisurgery.com
- If you or someone you love has a gynecologic condition that may require surgery, contact my office to arrange a consultation, **PHONE**.
- Or, to locate a *da Vinci*® GYN Surgeon in your area, visit the hospital locator on www.davincisurgery.com.



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da Vinci® ... Changing the Experience of Gynecologic Surgery

This program presents the opinions of and techniques used by an independent surgeon and not those of Intuitive Surgical. Intuitive Surgical does not provide clinical training nor does it provide or evaluate surgical credentialing or train in surgical procedures or techniques. While clinical studies support the effectiveness of the *da Vinci*® System when used in minimally invasive surgery, individual results may vary. Surgery with the *da Vinci* Surgical System may not be appropriate for every individual. Always ask your doctor about all treatment options, as well as their risks and benefits.

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