# Hysterectomy

#### Definition

Hysterectomy is the surgical removal of the uterus (womb) resulting in inability to become pregnant and immediate cessation of menstruation. It is a common operation and may involves removal of the cervix, ovaries and fallopian tubes at the same time.

Please discuss all aspects of this surgical procedure, its risks and benefits and any possible alternative therapies. Your health care provider will help you decide which type of hysterectomy is appropriate for you, depending on your indications for surgery and your medical history.

## Types of hysterectomy

- Total or simple hysterectomy (and removal of both tubes) involves removal of the entire uterus, including the cervix. At the same time, it is advisable to remove both fallopian tubes as well because this will be able to reduce your chance of developing ovarian and fallopian tube cancer later. This procedure is called salpingectomy. Both the fallopian tubes are usually removed at the same time to reduce the risk of ovarian cancer.
- 2. Subtotal (partial; supracervical) hysterectomy removal of the uterus above the cervix, leaving the cervix intact. In this case, regular Pap smear (Thin Prep) is advised after the surgery. This type of surgery is seldom performed now and usually done in situation whereby there are dense adhesions surrounding the cervix and removal of the cervix pose additional risk of injuries to ureters and bladder.
- 3. Radical hysterectomy removal of the uterus, cervix and surrounding tissues. This is usually done for treatment of pelvic organs cancer.
- 4. Total hysterectomy with bilateral salpingo-oophorectomy removal of the uterus, cervix, both fallopian tubes, and both ovaries. When both ovaries are removed, you will experience what is called surgical menopause. A unilateral oophorectomy procedure leaves one ovary behind.

## Reasons for the procedure

- Endometriosis.
- Uterine fibroids.
- Heavy menstrual bleeding (after failed medical therapy and not suitable for other minimally invasive alternatives)
- Uterine prolapse.
- Endometrial hyperplasia.
- Severe, chronic (long-term) infections, such as pelvic inflammatory disease.
- Chronic pelvic pain.
- Ovarian growths, if persistent or symptomatic.
- Pelvic adhesions.
- Cancer of the uterus, cervix, ovaries, or fallopian tubes.

### Description of the procedure

- A general anaesthetic will be administered. The procedures may take 1 to 2 hours.
- Antibiotics to prevent post surgical infection is usually given at the start of surgery.
- A urinary catheter is placed into the bladder after the general anaesthesia.
- 1. With an ABDOMINAL HYSTERECTOMY, an incision is made in the abdomen (either horizontal in

- lower abdomen or vertical, depending on the diagnosis and/or size of the uterus). The abdominal organs are examined. The uterus and cervix are cut free and removed. Other organs and tissue may be removed. The vagina is often closed with sutures at its deeper end. The surgical wound (including the skin) is closed in layers with sutures.
- 2. With VAGINAL HYSTERECTOMY, the procedure is done vaginally. An incision is made in the upper end of the vagina. The cervix is separated from the bladder in front. The ligaments containing the blood vessel to the uterus are clamped with a surgical clamp, cut and tied with sutures. The uterus and other structures are brought out through the vagina, and the cut end of the vagina is sutured. This technique is often used in cases of uterine prolapse or when vaginal repairs are necessary for related conditions. When a vaginal hysterectomy is performed, any sagging of the vaginal walls, urethra, bladder, or rectum can be surgically corrected at the same time. This is also known collectively as pelvic floor repair. For example, anterior colporrhaphy is a vaginal procedure to reestablish the supports between the bladder and vagina to fix a cystocele (descend of the bladder). If there is herniation of the rectum into the vagina (called rectocoele), a posterior colporrhaphy will be required to correct this defect.
- 3. LAPAROSCOPIC ASSISTED VAGINAL HYSTERECTOMY (LAVH) is a combined procedure that can aid in the removal of the uterus vaginally when it otherwise would require an abdominal incision. This procedure is performed with the aid of a laparoscope (a tiny telescope that is hook up to a monitor), which is inserted through the navel. Instruments are inserted through additional tiny incisions in the abdomen and are used to cut and separate the uterus from the surrounding attachments (usually the upper structures of the uterus including the fallopian tubes, ovaries plus the ligation of the blood supply). Once this is completed, an incision is made in the upper end of the vagina and the pelvis entered from vagina. The surgery is completed vaginally. The uterus and other structures are removed vaginally. Closure of the vagina can be done either vaginally or through the laparoscope.
- 4. TOTAL LAPAROSCOPIC HYSTERECTOMY (TLH) is similar to LAVH discussed above except that the whole procedure is done through the laparoscope. At the end of the procedure, the uterus and structures are removed vaginally, and closure of the vaginal incision is done via the laparoscope. Not all cases are suitable for LAVH or TLH especially those with big uterus or fibroids, cancer surgery and those with severe pelvic adhesions.
- Both ovaries and the fallopian tubes may be removed at the same time in certain women especially
  those with suspected or proven cancer cases, endometriosis or nearing menopause or already
  menopause.

## Possible complications

In general, the risk of complications is low in those fit and healthy women undergoing surgery for benign conditions. The risk is increased if there is associated medical illness (poor fitness for surgery), elderly women, women undergoing repeated abdominal surgery or presence of cancer. The complications are:

- Excessive bleeding (may require a blood transfusion).
- Surgical wound infection.
- Inadvertent injury to the bowel, bladder or ureters (which is the tubes going from the kidneys to the bladder), or nerve damage.
- Anaesthetic complications.
- Urinary tract infection.
- Respiratory infection, particularly pneumonia.
- Urinary retention, requiring continued use of a catheter.
- Bowel obstruction.
- Post-operative pelvic pain.

- Blood clots in calf veins (deep vein thrombosis), which can travel to the lung, causing lung damage.
- Fistula (abnormal opening) between the vagina and bladder or rectum.

# Before the operation

- Consent for operation should be signed.
- Relevant investigation that may be taken will depends on your medical illness and age. This may include blood tests, ECG (electrocardiogram) and chest X-ray.
- A small enema or laxatives is given one or two nights before or on the morning of the surgery to empty the bowel. Shaving of the operative site is done before surgery (for abdominal approach).
- For complicated surgery whereby bowel adhesions is suspected, a full bowel preparation with Fortrans is required. This will help in cleansing of the intestines from fecal matter and secretions. It is important to have a clean and empty bowel to minimize complications during difficult pelvic surgery.
- You are required to fast for at least 6 hours before surgery (no food or drinks at all for 6 hours). For example, if the surgery is in the morning, you should skip breakfast. If it is in the afternoon, you can have an early light breakfast (eg. tea/coffee/milo and toast) but make sure that this is taken at least 6 hours before the surgery. Please reconfirm this with your doctor.

## Post-operative care

- Hospital stay may be 3 to 5 days.
- Food is not allowed immediately following the surgery. Adequate hydration will be given via an intravenous line. You may be allowed to start clear fluid after returning from operating theatre. Your doctor will review periodically to decide when to start orally. Initially, start with clear liquid diet and then followed by nourishing fluid. Once you can tolerate orally and the gastrointestinal tract start to function again, you will be given soft diet and later progress to solid food. There are no dietary food restrictions. You should eat a well-balanced diet to promote healing. However, you should avoid herbal remedies as these can have side effects and may promote bleeding.
- Depending on the diagnosis and the extent of surgery, a small drain (tubing) may be inserted into the abdominal cavity after the surgery to allow any excess blood to drain out. This is usually removed in 24 to 48 hours later when drainage is minimal.
- There will be a urinary catheter in the bladder to allow drainage of urine and is usually removed the one to two days later.
- Pain relief medication will be given via injection and later change to oral tablet. Epidural analgesia for post-operative pain relief can be offered in selected cases.
- Antibiotics is given at time of operation and may be continued if there is a risk of infection.
- Abdominal or pelvic surgery can predisposes the woman to a higher risk of deep vein thrombosis and pulmonary embolus. A deep-vein thrombosis (DVT) is a blood clot that develops within a deep vein, most commonly in the leg. Symptoms of a DVT include pain, swelling, and tenderness, usually in the calf, and a rope-like hardness running down the back of the lower leg A pulmonary embolus is a blood clot within the lung, which is often a clot that has dislodged from one of the deep veins of the leg and made its way to the lung. Both conditions are rare. You may be given an injectable medication to reduce your risk of developing deep vein thrombosis and pulmonary embolus. This type of medication is a blood thinning agent, which helps to prevent blood clots. However, side effects will include excessive bleeding, wound haematoma and bruising from the injection sites. The decision to give is based on various medical guidelines and your risk profiles. Other measures to reduce this risk are wearing compression stockings immediately after surgery, early mobilization (preferable on the following day), ensure adequate hydration and intermittently moving your lower limbs while sitting or lying down. You should continue doing these even when you are at home. The risk is much lower with straight forward uncomplicated hysterectomy and those done via either

- vaginal or laparoscopic route.
- Getting up from bed on the following day it is easier if you roll to your side at the edge of the bed. Put your head on your elbow, then slowly dropping both legs over the side of the bed. At the same time, slowly push yourself up sideways with your elbow and sitting up slowly into a sitting position. Try to use the other hand for support by crossing it over your body. Sit for a while on the bed to get your balance and then slowly stand up. You can do the opposite to get back into bed (in reverse order). By using this method, you will put less pressure on the stitches and abdomen
- Gas pain (abdominal wind) can be a problem following the operation for some women. Early
  mobilization will help to reduce the wind. If the problem persists, medication can be prescribed for
  relief.
- Wound dressing will be removed to assess the wound prior to discharge. A new dressing will be applied before home.
- For Abdominal Hysterectomy, non-absorbable sutures are usually removed from the skin incision on the seventh day. If absorbable suture is used, then the suture need not be removed. It will dissolve by itself after a few weeks. During wound healing, a firm ridge may form along the incision. As it heals, the ridge will gradually recede. Numbness around the incision site is common. This occurs because of the cutting of the nerves when making the incision to enter the abdominal cavity. The nerves will grow back. Overtime, you may also feel a mild tingling sensation and then slowly returns to normal over several months. Some women may be prone to form a thick type of scar called a keloid. If you are concern, please ask your doctor about this and your doctor may recommend some scar prevention therapy, either the gel type (apply twice a day) or a special adhesive waterproof plaster. It should be started from 7 to 14 days after abdominal hysterectomy and needs to be done for at least 3-4 months to see an effect.
- For Laparoscopic or Vaginal Hysterectomy, absorbable suture is often used. Therefore, the stitches need not be removed.
- Once home, someone should be available to help care for you for the first few days.
- Avoid douching, swimming, and soaking baths for few weeks.
- Shower as usual. Wipe dry the incision site with a clean dry towel after the shower.
- Vaginal bleeding will last for few days to one week. Use sanitary napkins to absorb blood or drainage.
   Once minimal, you can change to panty liner. Tampon use is not advisable.
- Your appointment for follow-up is usually on the seventh or eighth post-operative day.
- After effects of surgery may include constipation, urinary symptoms and fatigue.
- Following removal of the uterus, you will no longer have your monthly periods or be able to become pregnant.
- It is still necessary to have regular pelvic examinations after hysterectomy, especially if the ovaries or the cervix are conserved; if you still have your cervix, you'll still need to have a Pap smear (Thin Prep) regularly.
- For those who have monthly pre-menstrual like symptoms prior to surgery, these symptoms may
  persist after the hysterectomy with conservation of the ovaries even though there is no longer
  monthly menstrual bleeding.
- For those who had uterus, cervix, both fallopian tubes and ovaries removed, they may start to develop post-menopausal symptoms such as hot flushes, chills, night sweats, sleep problems, and mood changes. If severe enough, do consult your doctor to discuss medical (oestrogen replacement therapy) and/or non-medical therapies for the relief of menopausal symptoms.

### **Abdominal binder**

An abdominal binder is a broad compression belt that encircles your abdomen. It is usually made from elastic and nylon materials with Velcro, hoop, or loop closures. It comes in various shapes, sizes and softness of materials. You may want to wear one after your abdominal hysterectomy, especially if you have a pendulous abdomen (hanging belly). It may help to reduce post-operative pain and helps you to

move around easily. The compression provided by the binder will also reduce the pain when you cough or sneeze. It can support your surgical incision especially if it is a midline incision. Do take note that some women do not find it useful. You should try it if you think there is a need for you. In the end, you may or may not like it.

It is not necessary if you had a laparoscopic or vaginal hysterectomy. When choosing an abdominal binder, it is important to get the right size and wear it properly. Do make sure it is not too tight and you are able to breathe and sit comfortably.

## **Activity**

- To help recovery and aid your well-being, resume daily activities, including work as soon as you are
  able. Heavy lifting and strenuous activity should be avoided. Recovery at home may take 2 to 3
  weeks, with full activities resumed in 6 to 8 weeks. Incisional numbness, occasional aches and pains
  may last for another few weeks. For laparoscopic hysterectomy and vaginal hysterectomy recovery
  time is much quicker than abdominal hysterectomy.
- You can resume driving usually after 3 to 4 weeks, provided full mobility has returns and pain-killers medications are no longer required. It will be much earlier if you undergo either laparoscopic or vaginal hysterectomy. Please ask your doctor if you are not sure.
- Sexual relations may be resumed in 6 to 8 weeks (or longer depending on your doctor assessment). Please discuss this during your post-operative follow-up visit. Most women experience no change in sexual function; some report improvement, while others have a worsening sexual function, specifically loss of libido (sexual desire). Intercourse may be uncomfortable for a period of time. You may feel bruised or sore, the vagina sensation may feel different and vaginal dryness can occur. Time, patience, trying different techniques and good communication with your partner should help alleviate any problems and increase your pleasure during intercourse. Contraception is not required now.

# See your doctor if there is:

- Increasing pain, swelling, redness, discharge or bleeding in the surgical area.
- Vaginal bleeding which soaks more than 1 pad or tampon each hour.
- The urge to urinate frequently, especially if associated with pain and abnormal urine colour.
- Persistent and abnormal vaginal discharge.
- Increasing nausea and vomiting, with or without abdominal distention.
- Short of breath or feel faint.
- Signs of infection, including headache, muscle aches, dizziness or a general ill feeling and fever.

#### Disclaimer

This is for informational purposes only and is not intended to be a substitute for professional medical advice, diagnosis, or treatment. It is important for readers to seek proper medical advice when necessary.

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