ALANA HEALTHCARE

Hysterectomy

This information package is not a substitute for a medical opinion. It is designed as an educational reference to allow you to make more informed decisions in consultation with your doctor. Much of what is conveyed during a consultation can be forgotten, this information is here to help remind you of various points that may have been discussed in your consultation and the suggestion of your tailor-made care plan. Please take your time to read the following information carefully and discuss it with relatives, friends and your Alana Doctor.

What is a hysterectomy?

Hysterectomy is a surgical procedure to remove your uterus. The uterus is the organ that allows for pregnancy and causes menstruation, under the influence of hormones that are produced from the ovaries. At the time of a hysterectomy, the uterus is removed either completely, including the cervix (a total hysterectomy), or partially, where the cervix is left behind (a subtotal hysterectomy). Generally, with hysterectomy we recommend removal of the Fallopian tubes since this reduces the future risk of ovarian cancer. This is called 'opportunistic salpingectomy', that is, the tubes are removed at the same time since you are having the uterus removed. Tubal removal is simple and very low risk in this situation and the tubes do not perform any ongoing function. However, in women who have not reached menopause, and in low-risk women less than 60 years of age, we usually recommend to preserve at least one ovary as this has long-term benefits. There may specific indications to remove your ovaries and your Alana Doctor will speak about your personal circumstances.

A hysterectomy is considered major surgery and is a very common procedure. You should read this information sheet and ask if you have any questions before undergoing a hysterectomy.

Why do I need a hysterectomy?

A hysterectomy may be performed for any number of reasons. The most common are outlined below:

For heavy or abnormal uterine bleeding: There are a number of conditions that may cause women to have heavy bleeding. Two of the most common are fibroids and abnormal uterine bleeding - endometrium (AUB-E). Fibroids are common, benign (non-cancerous) tumours that grow in the muscle of the uterus. Hysterectomy is one way to treat fibroids. This ensures that the fibroids will never return. AUB-E is when the uterus responds to your normal level of hormones but causes excessive bleeding. Other causes for heavy bleeding such as polyps (AUB-P) and fibroids (AUB-L: L stands for leiomyoma - the medical term for fibroid) must be excluded by ultrasound or other investigations.

For pelvic pain: For women with persistent pelvic pain that does not respond to other treatments, hysterectomy is sometimes an option. There are many causes for pelvic pain and removing the uterus does not guarantee that the pain will always be reduced. Endometriosis is a condition that causes pain and infertility (difficulties becoming pregnant) for some women. Hysterectomy may offer some advantages to women with endometriosis who have completed their family. Adenomyosis is a condition that can lead to both pelvic pain and abnormal uterine bleeding (AUB-A). This is where the lining of the uterus (the endometrium) grows inside the muscular wall (the myometrium) of the uterus. These small areas of abnormally placed tissue can cause substantial symptoms such as pain and bleeding. It is sometimes difficult to diagnose this condition and hysterectomy may be advised if it suspected since this is one of the few treatments that may help improve the symptoms.

To treat uterine prolapse: A uterine prolapse is where the uterus falls down into the vagina and sometimes is seen or felt coming through the vagina as a lump. Other organs can also prolapse and be felt as a lump including the bladder and the bowel. If this is the problem for you, then it will be necessary to assess other organs that may have prolapsed and hysterectomy may be recommended as part of your care.

To treat gynaecological cancer or pre-cancerous conditions: For women who have cancer or a pre-cancerous condition, hysterectomy may be an essential part of their treatment. The type of hysterectomy will be determined by the type of cancer or pre-cancerous condition. Usually such surgery would be carried out by or in conjunction with a specialist gynaecological oncologist (cancer specialist). You should speak to Your Alana Doctor if you are concerned about this as a possibility.

What is involved in a hysterectomy?

Hysterectomy may be performed alone or in conjunction with other procedures. Hysterectomy generally takes 1-3 hours and is performed as an inpatient procedure under a general anaesthetic. The decision to undergo hysterectomy, as with any surgical procedure, is always yours and should not be made in a rush. Make a decision only when you are completely satisfied with the information you have received and believe you have been well informed. If you decide to undergo hysterectomy, you will be asked to sign a consent form with your Alana Doctor who will explain the procedure and the risks involved. Before signing, read it carefully and ask any questions that you may have.

Depending on the type of hysterectomy, you will be an inpatient in the hospital for approximately the following number of days:

Type of Hysterectomy	Number of nights in hospital (approximately)*
Vaginal hysterectomy	2
Laparoscopic hysterectomy	2
Abdominal hysterectomy	5
Radical hysterectomy	7
*Note that these times are approximates only and may vary according to the individual patient or procedure.	

What sort of hysterectomy do I need?

There are different types of hysterectomy:

- A **complete or total hysterectomy** removes the cervix as well as the uterus. This is the most common type of hysterectomy. Note that 'hysterectomy' does not include removal of the ovaries. This is true for any of the subtypes of hysterectomy. If you want (or alternatively do not want) your ovaries removed, then this should be discussed with Your Alana Doctor at the time of booking your surgery. Removal of the ovaries is termed 'oophorectomy' and you will need to specifically note if the ovaries are to be removed. As noted previously, it is recommended to remove the tubes at the time of hysterectomy. A total hysterectomy can be performed vaginally, laparoscopically or abdominally.
- A **partial or subtotal hysterectomy** (also called a supracervical hysterectomy) removes the upper part of the uterus and leaves the cervix in place. This type of surgery can be performed laparoscopically or abdominally. When performed laparoscopically, the uterus needs to be cut into smaller pieces to remove it from the abdomen. This is termed 'morcellation' and you are referred to the information package on **Tissue Morcellation** in addition.
- A **radical hysterectomy** removes the uterus, the cervix, the upper part of the vagina, and supporting tissues. It nearly always involves removal of the tubes and ovaries as well as the uterus. Generally this type of surgery is done abdominally and is generally reserved for women with a cancer of the cervix, or other type or cancer.

One or both ovaries and fallopian tubes may be removed at the same time as hysterectomy. When both ovaries and both tubes are removed, it is called a bilateral salpingo-oophorectomy (BSO). If the ovaries are removed before menopause, the sudden loss of the main source of female hormones will cause immediate menopause (surgical menopause). This can cause more severe symptoms than a natural menopause. It is advisable to discuss hormone replacement options with Your Alana Doctor prior to your surgery if you are planning to have your ovaries removed. You should discuss the advantages and disadvantages of removing your ovaries at the time of hysterectomy with your Alana Doctor.

Vaginal Hysterectomy: If you are having a vaginal hysterectomy, there will be no incisions made in the abdomen. The surgery is performed using a general or regional anaesthetic (where you are not fully asleep but have no pain from the procedure; this is usually achieved with an epidural or spinal block) in an operating theatre at a hospital. Once you have the appropriate anaesthetic, your legs are placed in stirrups for access to the vagina and you are covered in sterile surgical drapes throughout the procedure. The cervix is then located and a circular incision is made around the cervix. This allows the bladder to be elevated away from the uterus at the front and the bowel pushed away at the back. The supports of the uterus called the uterosacral ligaments, the main blood vessels to the uterus and the attachment of the uterus to the ovaries are then all secured and cut and the uterus is removed. The top of the vagina is then closed and any additional surgery (such as repair of a prolapsed bowel or bladder) is performed if required before the surgery is complete. If the ovaries need removing, this is best performed by a laparoscopic hysterectomy (see below).

A vaginal hysterectomy has been shown to be the 'best' type of hysterectomy if it can be performed, since it offers a quick recovery with relatively low complications. Vaginal hysterectomy is not recommended in women with endometriosis, women who require ovarian removal or women who have large fibroids or known adhesions. If additional surgeries are required at the same time as your hysterectomy, then you should discuss with your Alana Doctor how this will impact the approach to your hysterectomy.

Following a vaginal hysterectomy, you should recover quickly and will usually be in hospital for an average of 2 nights. You will be discharged when you have normal bladder function, are able to eat, drink and walk and Your Alana Doctor is happy that it is safe and appropriate for you to go home.

Laparoscopic Hysterectomy: Laparoscopic or 'keyhole' hysterectomy is where the uterus is removed with the aid of a telescope placed inside the abdomen through the umbilicus (belly button). The attachments of the uterus are divided and the uterus is then removed either through the vagina or in the case of a subtotal hysterectomy in strips through a special instrument designed for this purpose. The subtype of laparoscopic hysterectomy depends on how much is done via the 'keyholes'. The table below describes the differences in the subtypes of laparoscopic hysterectomy.

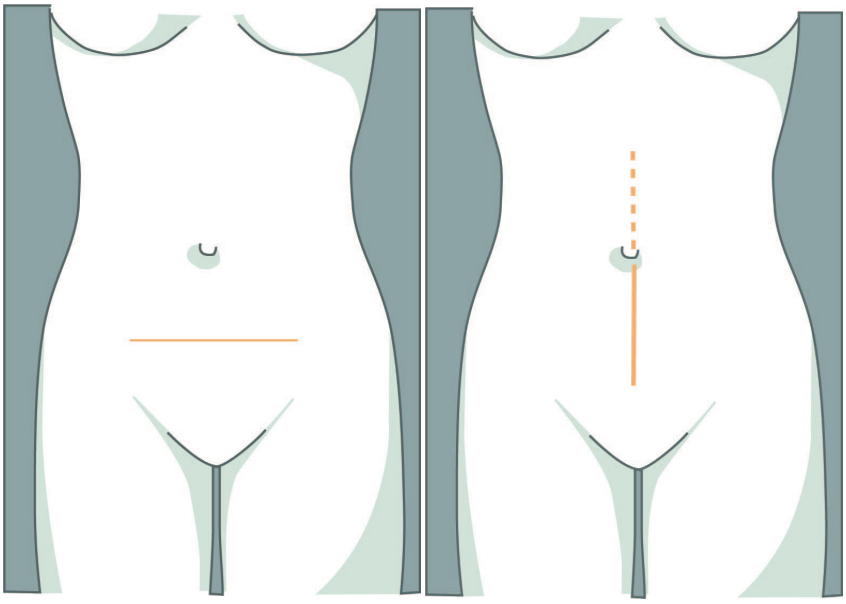
Name of hysterectomy	Definition
Laparoscopic assisted vaginal hysterectomy	A laparoscope is placed to ensure that there is no pathology such as endometriosis, adhesions or other abnormality that requires treatment at the same time. The ovaries may be secured using laparoscopic assistance. The rest of the hysterectomy is carried out vaginally. The cervix is removed.
Laparoscopic hysterectomy	A laparoscope is placed and the ovaries are secured and the main blood vessels to the uterus are secured using laparoscopic assistance. The rest of the hysterectomy (securing the uterosacral ligaments) is carried out vaginally. The cervix is removed.
Total laparoscopic hysterectomy	A laparoscope is placed and the entire procedure is carried out using laparoscopic assistance. There is no vaginal component to the procedure. The cervix is removed.
Laparoscopic subtotal hysterectomy	A laparoscope is placed and the ovaries are secured and the main blood vessels to the uterus are secured using laparoscopic assistance. The uterus is removed, the cervix is oversewn and the uterus is removed in strips using a special instrument. There is no vaginal component to the procedure. The cervix is retained.

Generally, your Alana Doctor will perform total laparoscopic hysterectomy (or subtotal at a patient's request) if a laparoscopic procedure is recommended. Laparoscopic hysterectomy is performed using a general anaesthetic (where you are fully asleep) in an operating theatre at a hospital. Once you are asleep, your legs are placed in stirrups for access to the vagina and you are covered in sterile surgical drapes throughout the procedure. The laparoscope will be placed through the umbilicus (belly button) and there will be at least 4 incisions made in the abdomen. You should also refer to the information package on Preparing for Laparoscopy available at this site. The uterus will be removed according to the subtype of laparoscopic hysterectomy that has been decided with you, tailor made to your particular needs.

The general procedure involves the entire pelvis being carefully assessed for any additional problems, the supports of the ovaries secured, the main blood vessels to the uterus secured and then the cervix secured/removed. The uterus is removed by the appropriate method. If required, the top of the vagina is then closed and any additional surgery (such as repair of a prolapsed bowel or bladder) can be performed by the laparoscopic or vaginal approach.

A laparoscopic hysterectomy is the best hysterectomy when a vaginal hysterectomy cannot be performed because of the presence of disease such as endometriosis, large fibroids, adhesions or when the ovaries need to be removed. It can also be performed if additional surgeries are required (such as repair of the pelvic floor). Recovery time following laparoscopic hysterectomy is similar to vaginal hysterectomy and much faster than for an abdominal hysterectomy. Following a laparoscopic hysterectomy, you should recover quickly and will usually be in hospital for an average of 2 nights. You will be discharged when you have normal bladder function, are able to eat, drink and walk and your Alana Doctor is happy that it is safe and appropriate for you to go home.

Abdominal Hysterectomy: An abdominal hysterectomy is performed via an incision in the abdomen. There are two types of incisions, demonstrated below. The type of incision that is required for you will depend on the size of your uterus and the need for additional surgery. Whilst the incision will usually be a sideways incision (across the bikini line), for large fibroids or when additional surgeries may be required in the upper abdomen (or if cancer is suspected), then a vertical incision (from the umbilicus or belly button to the pubic bone) is preferred.



Generally, abdominal hysterectomy is performed when the uterus is too big to take out safely with a laparoscopic hysterectomy. The most common reason for an abdominal hysterectomy would be large fibroids. If there is a cancer suspected, then it would be usual to have your surgery performed by the abdominal route. The main drawback to this type of surgery is that the wound in the abdomen can take time to heal and cause pain. If you are having an abdominal hysterectomy then you will usually be in hospital for 5-7 days after your procedure.

Radical Hysterectomy: A radical hysterectomy is usually performed when a cancer of the uterus or cervix has been diagnosed. This is usually performed through a vertical abdominal incision (from the umbilicus or belly button to the pubic bone). At the time of surgery the uterus and its supporting tissues, the cervix, upper part of the vagina as well as the ovaries and tubes are removed. It is important that these tissues are removed to decrease the chance of the cancer recurring. Sometimes the lymph nodes are removed. These are small glands that drain fluids from cells and tissues. Removing them also helps to decrease the likely chance of a cancer recurring. A possible side effect from removing the lymph glands is that you may have swelling in your legs on a regular basis since the fluid is not easily drained away. Radical hysterectomy is usually performed by or in conjunction with a gynaecological oncologist (cancer specialist) and will usually require a week in hospital to recover. You may require additional treatments such as chemotherapy or radiation therapy in addition to your surgery. This will be discussed with you fully.

What are the risks from a hysterectomy?

A hysterectomy is a major surgical procedure and like any surgical procedure is associated with some risk. It has been estimated that the risk of any complication occurring following a hysterectomy is about 30%. The majority of these are minor complications such as wound infections, bladder infections, minor injuries to muscles or nerves from being positioned on the operating table and a prolonged time for bladder function to return following removal of the catheter. These complications will usually be identified and treated and often will not require you to stay in hospital. The exception to this is if your bladder does not work as it should. The main reason for the bladder not working after a hysterectomy is that it is normally located on the front of the uterus and in moving it away from the uterus to prevent any damage whilst removing the uterus and cervix, the nerves to the bladder can be bruised or injured. It may take a period of time for these nerves to recover their normal function. For this reason, a specific post-operative protocol is in place to scan the bladder by ultrasound to ensure that it has normal function. This will help to prevent short term problems such as urinary tract infections and may prevent long-term bladder problems.

Nearly all women who have hysterectomy will have a small blood clot at the top of the vagina where the uterus has been removed. This is called a haematoma, which is like a bruise. Occasionally, this haematoma can become infected or may be very large and require drainage. Symptoms of an infected haematoma include offensive vaginal discharge, pain and/or fever. An ultrasound may help to diagnose a haematoma. Treatment can include antibiotics, either by mouth or through a vein. Occasionally the haematoma may need to be drained under an anaesthetic through the vagina. Rarely a laparoscopy or laparotomy would need to be performed.

The most serious complications following hysterectomy are considered to be injuries to the bladder (the organ that holds urine), the ureter (the tube that leads from the kidney to the bladder), the bowel and the major blood vessels. In addition, medical complications such as clots that develop in the legs or lungs, or excessive stress that is placed on the heart and lungs from the surgery can occur resulting in heart attack or stroke. The likelihood of these complications occurring will depend on the reason for your hysterectomy, your past surgical and medical history and your age. You will be given a tailor-made consent form that will outline the likely risks for you based on these factors. It is important to recognise that your long-term safety is the most important aspect of your treatment and the necessary steps to ensure your safety is the first priority.

Specific problems can include bladder injuries, which are usually recognised at the time of surgery. If you are having a vaginal or laparoscopic hysterectomy, these can usually be dealt with by that route, without having to make a large incision in your abdomen. Occasionally a large incision in the abdomen would have to be made to repair the bladder. If you required a bladder repair following an injury, you would have a catheter in your bladder which may stay in for up to one week. You may be able to go home with the catheter in after instruction on caring for it at home if this is your preference.

Injuries to the ureter (the tube that leads from your kidney to your bladder) may only require a stent - a small hollow tube placed through the ureter from the kidney to the bladder for about 6 weeks. These can be inserted through the bladder without an incision in the abdomen and can be removed through the bladder in a simple procedure, again without an incision in the abdomen. Sometimes the ureter must be 're-implanted' in the bladder. This means that a large incision is made in the abdomen (vertical midline incision see picture), the ureter is cut and placed into the top of the bladder to drain normally. A stent would be placed as above and would need removing, usually at about 6 weeks. This procedure would normally be performed as an outpatient. The bladder and the ureter will usually function completely normally after this procedure. You will require a special X-ray test at between 6 weeks and 3 months to make sure that the bladder and the ureter are working normally.

Injuries to the large blood vessels are the most urgent complication and require immediate attention. If you are having a laparoscopic or vaginal hysterectomy it is likely that a very large incision (midline vertical incision) would be made in the abdomen for immediate repair. Almost certainly there would be a blood transfusion. Your stay in hospital is likely to be longer than anticipated. Injury to a blood vessel is a very serious and life-threatening complication.

Injuries to the bowel may occur during a hysterectomy and can be very serious. The injury to the bowel may be very

small and may not be detected at the time of the initial surgery. The injury may occur during any type of hysterectomy. If they are detected, then they can often be repaired by the route that the procedure is being undertaken. If you are having a vaginal or laparoscopic hysterectomy, then you may require a laparotomy to repair the injury. You will be given antibiotics and you may require a colostomy. A colostomy is where a loop of bowel is brought to the skin and stitched in place with a bag is placed over this. The bowel contents will empty into the bag. This will usually be in place for three months after the surgery to allow the bowel time to heal. When the bowel is healed, the loop of bowel is closed and placed back in the abdomen. Very occasionally the colostomy may be permanent. If a bowel injury occurs during surgery and is missed, then there may be development of a serious infection in the abdomen. This will require surgery with a large incision in the abdomen and a colostomy (see above). You are likely to have a prolonged hospital stay whilst the infection is treated and may require admission to an intensive care ward. This is a very serious and life-threatening complication. The risk of bowel injury that is missed is rare with any type of hysterectomy being less than 1/1000 cases. That is for every 1000 hysterectomies performed, there will be approximately one missed bowel injury.

Other Post-operative Complications

In the post-operative phase following hysterectomy, common complications may include infection in the bladder, the wounds, the top of the vagina or the cervix, medical complications such as clots developing in the legs or lungs, ongoing bleeding from blood vessels cut during the surgery. Whilst in hospital your observations will be taken and signs of temperature, increasing pain or problems with your urine will be monitored. You may require more tests and treatments if one of these complications occurs.

After you have gone home, if you have an increasing amount of pain, increasing vaginal bleeding, high fevers or sweats or vaginal discharge that is offensive then you should contact Alana Healthcare and ask for further advice.

Recovery following hysterectomy

A hysterectomy is a major surgical procedure and your recovery will depend on a number of factors:

1. The type of hysterectomy that you have;
2. Your age;
3. Any associated medical problems that you have;
4. Individual response to surgery and post-operative pain;
5. The occurrence of any complications.

Recovery rates will vary for each individual and are between 1-8 weeks. Generally, you should allow 2-4 weeks recovery following a vaginal or laparoscopic hysterectomy and 6-8 weeks following an abdominal hysterectomy. You should not do heavy lifting for 6 weeks and no heavy exercise for the first 2 weeks. You are encouraged to walk regularly each day and rest when you feel tired. You can drive a car when you are comfortable stopping in an emergency (usually about 10 days). You are also advised to consult your car insurance company regarding any restrictions on driving following surgery. You can resume intercourse after you have been seen by your Alana Doctor in follow-up or at 2-4 weeks. You should stop intercourse if there is pain or bleeding and contact your Alana Doctor.

Frequently asked questions

1. If I have a hysterectomy will my hormones be changed?
    a. Hysterectomy does not always involve taking out the ovaries and if the ovaries are not removed then the hormone levels will be the same.
    b. This means, that for women who have a hysterectomy where the ovaries are not removed, that you will go through menopause at the normal time. Because there are no further periods, the symptoms of menopause may be hot flushes or sweats, or may not occur at all.
2. Do I need to have Cervical Screening Tests (previously known as Pap smears)?
    a. If you have had a subtotal hysterectomy, where the cervix is left behind, then you will need to continue to have Cervical Screening Tests at the recommended interval. You should consult your Alana Doctor, to ask how often these need to be taken.
    b. If you have had a radical hysterectomy for a cancer then you will need to continue Cervical Screening Tests as directed by your Alana Doctor.
    c. If you have had any other type of hysterectomy and your previous smears have always been normal, then you do not need to have further Cervical Screening Tests. If you have had abnormal smears, then you should ask your Alana Doctor if these need to be continued.

3. How soon can I go back to work?
    a. Recovery following hysterectomy is variable and depends on the type of hysterectomy and the patient. The usual range would be 1-4 weeks for vaginal or laparoscopic hysterectomy and 4-8 weeks for abdominal hysterectomy.
    b. You can resume intercourse once there is no further bleeding and the pain has settled. This will usually be between 6-8 weeks.
4. Is bleeding normal after a hysterectomy?
    a. For the first 6 weeks it is not uncommon to get vaginal bleeding. This is because the top of the vagina is healing. As the stitches dissolve sometimes you can get bleeding when there has been none previously.
    b. You should contact your Alana Doctor if your bleeding is very heavy or there is an offensive odour to the blood that is coming away.
    c. If you have had a subtotal hysterectomy where the cervix is left in place, then you may get a small amount of spotting on a monthly basis.
5. Will a hysterectomy affect my sex life?
    a. Studies have shown that overall there is no change in sexual life or pleasure after a hysterectomy.
    b. Individual women may notice some changes, with some reporting diminished sexual response whilst others report improved sex following their surgery. This is true whether you have a total hysterectomy (where the cervix is removed) or a subtotal hysterectomy (where the cervix is retained). The main difference is that you may return to sexual activity sooner if you have a subtotal hysterectomy.
    c. There is no way of predicting if there will be any change – good or bad.
6. What happens to the eggs that are produced from the ovaries?
    a. If you have had a hysterectomy and the ovaries are left inside, then you will continue to produce eggs normally. These will be released from the ovaries and will be reabsorbed through the lining of your abdomen.
7. Will all pain be gone after a hysterectomy?
    a. If you are having a hysterectomy for chronic pelvic pain, then you may not have complete relief of your symptoms.
    b. Period pain is likely to be reduced, but studies have shown that for some women, they may still experience period pain, even though they have no periods. This is not common.
    c. Some women who have hysterectomy for chronic pelvic pain will have no improvement in their symptoms.