A hysterectomy is an operation to remove the uterus. Depending on the type of hysterectomy being performed, accompanying organs such as the fallopian tubes, ovaries and cervix are often removed at the same time.

Hysterectomy is one of the most common types of elective surgeries for Australian women. Most hysterectomies are performed to treat conditions such as fibroids (growths that form inside the uterus), heavy bleeding, endometriosis, adenomyosis (when endometrial tissue grows into the muscle wall of the uterus), uterine prolapse and cancer.

It is important for women to be aware that a hysterectomy is major surgery and should not necessarily be considered the first-line treatment for heavy menstrual bleeding. A hysterectomy should be reserved for women for whom more conservative treatment options have not worked, whose family is complete and who understand the risk involved with this type of major operation. The development of a range of new treatments for some of the conditions hysterectomy is used to treat is expected to reduce the number of hysterectomies currently performed.

What you need to know about a hysterectomy

It is important for women to ensure that they make their own individual decision about whether to have a hysterectomy. Making this decision can be a difficult and emotional process. It is important for women to be well informed about the procedure so they can confidently discuss all available options with their gynaecologist.

Because a hysterectomy involves the removal of the uterus it is important that women realise they will no longer menstruate or be able to conceive after the procedure. For some women the prospect of no more periods and the removal of the fear of pregnancy will bring relief. Other women may find the finality of the ending of their reproductive capability distressing.

In some cases, for example when a hysterectomy has been recommended for a non-cancerous condition without the prior offer of more conventional treatment, women are advised to seek a second medical opinion to ensure all treatment options have been fully considered.

Tips for visiting the gynaecologist

There are a number of questions you need to ask when visiting a gynaecologist to discuss the option of having a hysterectomy. Some examples of relevant questions are:

- What type of hysterectomy is being recommended and why?
- What are the success/failure rates of this method?
- Which organs will be removed?
- Will the method of surgery be abdominal, vaginal or laparoscopic?
- What experience has the surgeon had in the different procedures?
- What are the possible complications/side effects including possible impacts on sexual function?
- What is the length of recovery time in hospital and recuperation period at home?
- Will Oestrogen Replacement Therapy be recommended?

It may be useful to bring a friend or partner to your appointment to provide support and take notes so you have a clear record of the consultation. You can also ask your specialist for written information about the procedure.
Different types of hysterectomy operations

There are four different types of hysterectomy operations.
- Sub-total or partial hysterectomy
- Hysterectomy with ovarian conservation
- Hysterectomy with oophorectomy
- Radical or Wertheim’s hysterectomy

SUB-TOTAL OR PARTIAL Hysterectomy

This involves the removal of a woman’s fallopian tubes, the upper two-thirds of the uterus and preservation of the cervix. This procedure is not common in Australia.

HYSTERECTOMY WITH OVARIAN CONSERVATION

This involves the removal of the fallopian tubes, uterus and cervix and preservation of the ovaries. This procedure is sometimes referred to as a total hysterectomy.

HYSTERECTOMY WITH OOPHORECTOMY

This involves the removal of the fallopian tubes, uterus and cervix and one or both sets of ovaries.

RADICAL OR WERTHEIM’S Hysterectomy

This involves the removal of the fallopian tubes, uterus, cervix, ovaries, nearby lymph nodes and upper portion of the vagina. This type of hysterectomy is used in the treatment of some gynaecological cancer cases.

Risks and benefits of keeping your ovaries

Some gynaecologists recommend ovary removal during a hysterectomy to prevent the possibility of developing ovarian cancer. Women who are at higher risk of ovarian cancer such as those with a family history should discuss the risks and benefits of keeping their ovaries with their gynaecologist.

While ovarian cancer is an extremely serious diagnosis, particularly because it tends to be at an advanced stage when diagnosed, it is important for women to be aware the risk of developing ovarian cancer is quite low compared to other cancers.
The rate of ovarian cancer in Australia is 10.7 cases per 100,000 females compared to 16.3 cases for cancer of the uterus and 112.4 cases for breast cancer. It is the ninth most commonly diagnosed cancer among females and accounts for 3 per cent of all reported cancer cases in women.

The side effects of ovary removal, on the other hand, can be significant. Ovaries produce sex hormones called androgens including testosterone which are important for maintaining strong muscles and bones, a positive protein balance, sexual desire and overall wellbeing. With up to 35 per cent of a woman's testosterone produced by ovaries, the remainder coming from the adrenal glands, this is a significant factor. Studies have shown, for example, that the surgical removal of ovaries can cause a 50 per cent reduction in testosterone levels which has been associated with significant deterioration of sexual desire, particularly in younger women. Women who suffer either premature menopause or who undergo surgical removal of both ovaries in early life commonly experience great distress at their loss of libido. While some research indicates testosterone therapy can improve sexual interest and wellbeing in women who are pre-menopausal with low libido, more research is needed to validate these findings.

Ovaries also convert testosterone to oestrogen. Removing the ovaries of a pre-menopausal woman therefore results in a reduction of the female hormones oestrogen and progesterone, bringing on an instant menopause referred to as a 'surgical menopause'. This drop in hormone levels may cause instant menopause-related symptoms such as hot flushes, night sweats and vaginal dryness and increase the risk of heart disease and osteoporosis.

It would seem, therefore, that the side effects of ovary removal, combined with the relatively low risk of ovarian cancer and reluctance of many women to take Hormone Replacement Therapy in the long term, indicate that retaining healthy ovaries during a hysterectomy would benefit many women's future health.

It is also worth noting that in some cases pre-menopausal women who keep their ovaries during a hysterectomy procedure can experience menoapause earlier than might be expected. Theoretically when the ovaries are retained in hysterectomy the only change experienced should be the cessation of periods and resolution of the reason for the surgery. In practice, however, a significant number of women whose ovaries remain after this type of hysterectomy experience symptoms of menopause up to four years earlier than might be expected. Possible explanations for this are that the surgery inadvertently altered the blood supply to the ovaries or the condition that resulted in the need to have a hysterectomy, such as endometriosis or cysts, had already reduced the normal life of the ovaries prior to surgery.

### Hysterectomy methods: abdominal, vaginal or laparoscopic

A hysterectomy can be performed in three different ways. The method chosen will depend on the surgeon's skills, expertise and preference. Also taken into account is the reason for the hysterectomy and characteristics such as a woman's weight, pelvic surgery history and if they have had children.

#### ABDOMINAL Hysterectomy

An abdominal hysterectomy is conducted when extensive exploration is required such as in the case of cancer, an enlarged uterus, obesity or if the woman has never had children. The presence of large fibroids, extensive adhesions or endometriosis are other examples where this procedure is often preferred.

An abdominal hysterectomy can be performed via a bikini line cut which is done horizontally, directly above the pubic hairline or via a vertical incision which involves a cut from the navel to the pubic hairline. The bikini line procedure is more commonly preferred as it leaves a less obvious scar and results in a shorter recovery time.

The main advantage of an abdominal hysterectomy is the lower incidence of damage to the urinary tract and blood vessels. This method also allows for the repair of a prolapse at the same time if needed. The disadvantage is that this method is generally more painful.

#### VAGINAL Hysterectomy

A vaginal hysterectomy involves making an incision in the upper portion of the vagina and removing the uterus through the vagina. The advantages of this method are less pain, a shorter hospital stay and the absence of a visible scar. A review of different surgical approaches to hysterectomy for non-cancerous conditions concluded that a vaginal hysterectomy should be performed in preference to an abdominal hysterectomy where possible.

#### LAPAROSCOPIC Hysterectomy

This term is used to describe a hysterectomy in which any part of the operation is performed laparoscopically, which involves making three or four small incisions in the abdomen. A laparoscope is an instrument that allows the interior of the abdomen to be viewed and is inserted through one of the incisions into the abdominal cavity. The surgeon can then view the pelvic organs on a video screen and insert surgical instruments through the remaining incisions.

Laparoscopic procedures have been promoted as advantageous to patients due to a shorter hospitalisation and sometimes recovery time compared to an abdominal hysterectomy. It is important to be aware the surgeon must be experienced in the procedure before these benefits can be achieved. Disadvantages of a laparoscopic hysterectomy include the possibility of a longer operating time depending on how much of the operation is performed laparoscopically, higher costs and an increased risk of damage to the urinary tract. Women considering a laparoscopic hysterectomy are advised to ask specific questions about the surgeon's training and experience in this particular procedure.

### Risks and complications

Hysterectomy risks and complications depend upon the type of hysterectomy performed and the individual woman's health status. Women should ensure they fully discuss risk levels with their gynaecologist.

The most common complications following a hysterectomy are post-operative fever and infection. Other more serious problems include haemorrhage, the formation of a blood clot in the lungs, damage to surrounding organs during surgery and urinary complaints. There are also the usual risks associated with the use of anaesthetics.

It is important for women to be aware there may be an increased risk of vaginal vault prolapse following a hysterectomy. A vaginal vault prolapse occurs when the top of the vagina drops down as a result of a reduction in support structures. Further surgery may be required to correct the problem. The risk of vaginal vault prolapse can be reduced at the time of hysterectomy by simple additions to the procedure such as leaving the cervix in place. Some specialists believe retaining the cervix will protect vaginal supports and help prevent prolapse, however, more research is needed to confirm if this is the case. It is worth noting that for some women, the cervix may be involved in orgasm and if it is removed they may experience a decreased sexual response.

### Recovery from surgery

Following surgery, women may feel nauseous as a side effect of the general anaesthetic and experience some abdominal pain and discomfort. Medication to relieve nausea and pain is available. There may also be some vaginal bleeding which should reduce after a few days. Women are encouraged to get up and walk around on the first
day following surgery to avoid constipation and gas and decrease the risk of blood clots and lung infections.

Hospitalisation time will vary according to the type of hysterectomy performed and whether any post-operative complications are experienced. Hospitalisation for an uncomplicated abdominal hysterectomy is generally two to four days and two to three days for vaginal or laparoscopic hysterectomy.

**IMPORTANCE OF REST**

It is important to be well prepared for your recovery at home post-surgery. Women must have complete rest for at least the first few days after they leave hospital. After that initial complete rest period, women can start to move around but must avoid standing for any length of time and ensure they sit or lie down as frequently as possible.

About three to four weeks after the operation women can start to increase their level of physical activity but heavy lifting and prolonged standing should continue to be avoided. This is to allow the tissues to heal correctly and avoid future damage. As a guide, women should not lift more than three to four kilograms (approximately equivalent to a full kettle of water) during this period. Heavy lifting should not be attempted until at least three months after surgery. Ideally, women should avoid unnecessary heavy lifting for the rest of their life to help preserve the benefits of the surgery.

**POST-HOSPITAL RECOVERY TIME**

The overall time it takes for a woman to recover from a hysterectomy depends on the type of hysterectomy performed and the individual characteristics of the person. Regardless of the method, women will generally require six to eight weeks before they can return to normal activities including work. Women should avoid any heavy lifting, bending at the waist, pressure on the wound, active sports or sexual penetration during their recovery period.

A post-operative check-up usually takes place about six weeks after the operation to ensure the body has healed properly. This visit provides an opportunity for a woman to discuss any concerns she may have and to ask what types of activities are now permitted.

**DEPRESSION**

Most women experience an improvement in mood and an increased sense of wellbeing following a hysterectomy. For many, relief from the gynaecological problems which led to the procedure as well as relief from the fear of pregnancy results in heightened sexual enjoyment.

Women at most risk of developing depression following a hysterectomy are those with existing psychological problems, women who do not find symptom relief, women who develop serious post-surgery complications or side effects and women who have rushed or been rushed into the procedure and have not had time to fully understand its implications.

Depression following hysterectomy is more common if the operation takes place due to cancer or severe illness rather than as an elective operation. Other risk factors for developing post-hysterectomy depression include if you are under the age of 40 or if the operation impacted on your plans to have children. This depression can be temporary, depending on your general outlook on life and the availability of a supportive network of family and friends.

Symptoms of depression may include severe and prolonged feelings of sadness and hopelessness; less interest in activities; decrease in appetite; significant weight loss or gain; sleep disturbance, decreased libido; lack of energy; and thoughts of death or suicide. Women experiencing these symptoms following a hysterectomy should talk to their general practitioner or counsellor or contact the Health Information Line (see final page for contact details).

**SURGICAL MENOPAUSE AND OESTROGEN REPLACEMENT THERAPY (ORT)**

Pre-menopausal women who have a hysterectomy with bi-lateral oophorectomy (meaning both ovaries have been removed) will undergo a surgical menopause. Unlike the gradual changes usually experienced by women in naturally occurring menopause, these changes are more sudden and can be distressing.

Oestrogen replacement therapy (ORT) is a treatment option often recommended by doctors to alleviate menopausal symptoms like hot flushes and vaginal dryness. This treatment usually involves using hormones in the form of pills, patches, sprays, gels or implants. Women who have had their uterus removed are usually only given oestrogen replacement as the progestogen component of hormone replacement therapy (HRT) is prescribed to prevent the thickening of the uterus and the associated risk of uterine cancer.

As only limited data is available on the risks and benefits of using ORT in women who have experienced a surgical menopause, women considering ORT are advised to discuss this issue in detail with their doctor.

For women who do not wish to take ORT, there are a number of alternative options which may help alleviate menopausal symptoms. These include eating a diet rich in phytoestrogens and calcium, participating in regular exercise, practising stress management strategies and considering natural and herbal remedies (see our Alternatives to HRT fact sheet).

**Sex after hysterectomy**

Penetrative sex is not recommended until the top of the vagina has safely healed which is generally about six to eight weeks after a hysterectomy. During this time women may wish to focus on other activities such as the touching of outer genitals, hugs, kisses and massage. Healing times differ between individuals so women may wish to discuss this with their gynaecologist at the post-operative check-up. Women experiencing problems with their sex life following a hysterectomy may find it helpful to see a psychologist, counsellor or sex therapist.

**PHYSIOLOGICAL CHANGES**

Many women do not experience any change in sexual activity following a hysterectomy. Some, however, may notice an increase in sexual desire and activity as a result of the alleviation of painful and inconvenient gynaecological symptoms. Not having to be concerned about unwanted pregnancy can also have a positive effect on some sexual relationships for pre-menopausal women.

Pre-menopausal women who have had their ovaries removed during a hysterectomy may experience vaginal dryness and thinness which can make penetrative intercourse uncomfortable. This can be alleviated by using a water-based lubricant such as K-Y Jelly, a vaginal oestrogen cream or pessary, or traditional ORT.

As the uterus elevates during sexual excitement and contracts with orgasm, women who were aware of uterine sensations prior to having a hysterectomy may also notice a change in sexual sensations.

**PSYCHOLOGICAL CHANGES**

Changes in the way a woman feels about herself can also have an impact on sexual desire and satisfaction. Some women who have recently had a hysterectomy may feel less feminine. For pre-menopausal women, their menstrual cycle may have played an important part in their sense of feminality and/or youthfulness and women with partners may fear they will be seen differently following a hysterectomy.
Pregnancy after UAE and complications in a ‘significant minority’ of women who have had a hysterectomy but still wish to have children. Other options for heavy bleeding

### Non-Hormonal and Hormonal Drugs

Treatment for heavy bleeding will depend on its cause but may include non-hormonal drugs such as Non-Steroidal Anti-Inflammatory Drugs (NSAIDs), which are painkillers that also reduce bleeding, or tranexamic acid and hormonal drugs such as the oral contraceptive pill.

### Intra-Uterine System (IUS)

The Mirena is an intra-uterine system which has been found to be very effective in reducing heavy bleeding. This system involves the insertion of a device similar to an intra-uterine device (IUD) that releases constant low dosages of progestogen directly into the uterus. It has been suggested that approximately 60 per cent of women can avoid a hysterectomy by using Mirena.

### Endometrial Ablation

Endometrial ablation (removal of the endometrial lining) is another alternative to a hysterectomy for women with heavy uterine bleeding. Most women who have had a successful endometrial ablation will have little or no menstrual bleeding.

In the past, endometrial ablation was mostly performed using laser, roller-ball treatment (when a ball-shaped electrode destroys the endometrium) or through endometrial resection (when a loop electrode is used to shave off the endometrium and some of the underlying tissues). However, these early types of procedures to remove the endometrial lining require additional specialist training and a high level of hysteroscopic (viewing) skill so are not offered by the majority of gynaecologists. Second generation techniques such as thermal balloon ablation, microwave endometrial ablation and a range of new laser-based treatments are less dependent on individual specialist skills and therefore do not require as much training and are more widely available.

It is worth noting that the United Kingdom’s National Institute of Clinical Excellence (NICE) guidelines recommend second generation over first generation techniques for heavy menstrual bleeding. A review compared the efficacy, safety and acceptability of both techniques and concluded that no apparent advantage was chosen.

### Other options for uterine prolapse

A uterine prolapse occurs when weakened pelvic floor muscles, ligaments or vaginal walls cause the uterus to drop from its pelvic cavity position into the vagina. Other pelvic organs like the bladder or bowel will often also prolapse when the uterus drops. A mild prolapse can be helped with regular pelvic floor exercises. Pelvic floor exercises involve strengthening the pelvic floor muscles by actively tightening and lifting them at timed intervals.

A mild to moderate prolapse may be treated with a ring pessary, which is a silicon device fitted into the vagina to physically support the uterus. Pessaries may be suitable for women who do not wish to have surgery or are unsuitable candidates, such as elderly women or women with medical conditions that make surgery high-risk. A pessary needs to be inserted by a health professional and replaced every three to four months.

A number of surgical procedures including different types of reconstructive surgery and vaginal repair work are available which...
correct uterine prolapse without hysterectomy. The purpose of these procedures is to correct anatomical defects, maintain or restore bladder and bowel function and maintain sexual function.

For further information on uterine prolapse see the Women’s Health Genital prolapse fact sheet.

**Other options for endometriosis and adenomyosis**

Endometriosis is a condition in which endometrial tissue that normally lines the uterus grows in other parts of the body, usually in the pelvis. Adenomyosis occurs when the endometrial tissue grows into the muscle wall of the uterus. Treatment for endometriosis and adenomyosis includes a range of hormonal drugs such as progestogens, danazol and GnRH analogues. Alternatively, the endometrial tissue can be surgically removed. Women experiencing heavy bleeding as the main symptom of adenomyosis may find the Mirena IUS brings relief.

For further information on endometriosis see the Women’s Health Endometriosis fact sheet.

**Further reading**

Women’s Health Endometriosis fact sheet

Women’s Health Genital prolapse fact sheet

Women’s Health Alternatives to HRT fact sheet
www.womhealth.org.au/factsheets/alternativestoHRT.htm

For help understanding this fact sheet or further information on hysterectomy call the Health Information Line on 3839 9988 (within Brisbane) or 1800 017 676 (toll free outside Brisbane).

This is one of a series of women’s health information fact sheets available at www.womhealth.org.au. A full list of references is available from Women’s Health or on the website.