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## **HYSTERECTOMY**

Adapted from the Internet Publication by Kirsten Braun at Women's Health Queensland Wide, 1998.

Every year, approximately 30,000 Australian women undergo a hysterectomy, the removal of their uterus. About 20% of these women also have an oophorectomy, the removal of one or both of their ovaries. The majority of hysterectomies are performed to treat conditions such as fibroids, heavy bleeding and pelvic pain. Despite recent advances in treating these conditions with means other than hysterectomy, the number of these operations remains high.

A factor in the high rates could be the general acceptance and normalisation of hysterectomies by both members of the medical profession and women themselves. Except in the case of cancer, a hysterectomy is not often a procedure that needs to be performed urgently. Therefore, a woman considering the procedure should take time to consider all of her options, including alternative treatments.

Deciding whether or not to have a hysterectomy can be an extremely difficult and emotional process. By becoming informed about the procedure, women can confidently discuss available options, concerns and wishes with their doctor, and make a decision that is right for them. Getting a second opinion may be good option.

### **Reasons for Hysterectomy and Some Alternatives to Consider**

Hysterectomies are performed to treat a range of different conditions. In Australia, the most common reasons include: fibroids; heavy, irregular or painful periods; prolapse; endometriosis; pelvic inflammatory disease (PID); and cancer.

*For Fibroids:* Fibroids are benign growths of uterine muscle tissue, also referred to as myomas or leiomyomas. Management options depend not only on the location and size of fibroids but, more importantly, on the severity of symptoms. Many fibroids are diagnosed when a woman is sent for pelvic ultrasound but their identification by such means does not mandate treatment. Indeed, they may have nothing at all to do with the symptoms that a woman is experiencing.

For women nearing menopause, simply waiting may be a viable option as the drop in oestrogen at menopause may result in the fibroids shrinking sufficiently to alleviate any symptoms. Similarly, fibroids can be temporarily treated with the synthetic hormones GnRH that induce a temporary menopause. Fibroids can also be removed surgically in an operation called myomectomy that does not involve removing the uterus. This may require laparotomy but can sometimes be performed laparoscopically or with a hysteroscope if the fibroid is submucous in location. For further information see [www.brinsmead.net.au/mdoc/Fibroids.pdf](http://www.brinsmead.net.au/mdoc/Fibroids.pdf)



*For heavy bleeding:* Excessive bleeding can be defined as bleeding that inconveniences a woman's daily activities. A variety of nonsurgical treatments can be used to control heavy periods. These include hormones (basically the oral contraceptive pill or its variants), a progestin-releasing intrauterine device (the Mirena), antiprostaglandin drugs (also known as NSAID's) or an agent that limits the release of blood from the uterine lining (Cyklokapron).

Endometrial ablation is the removal of the lining of the womb (endometrium) using either surgical hysteroscopy or a variety of other means. For further information on the control of abnormal uterine bleeding see <http://www.brinsmead.net.au/mdoc/Bleeding.pd>

*For uterine prolapse:* Uterine prolapse occurs when weakened pelvic floor muscles, ligaments or vaginal walls cause the uterus to drop from its original position in the pelvic cavity, into the vagina. Usually the bladder and bowel will also prolapse in conjunction with the dropping of the uterus. Mild prolapses can be helped with regular pelvic floor exercises, while mild to moderate prolapses may be temporarily treated with the use of ring pessaries (i.e. a plastic ring fitted firmly into the vagina to physically support the uterus).

More serious prolapses may be corrected with a surgical vaginal repair, which involves the lifting of the prolapsed organ and the stitching and tightening of the supportive tissues. This commonly includes vaginal hysterectomy because removal of the uterus provides access to important suspensory ligaments that are used to resuspend the prolapsed vagina, bladder and bowel.

*For endometriosis:* Endometriosis is a condition in which endometrial tissue (that normally lines the uterus and is shed externally each month as a menstrual period) grows outside the uterus, usually around the ovaries and between the uterus and rectum. This tissue also "menstruates" each month but this is trapped or internal menstruation that is irritant in the pelvis and painful.

Treatment for endometriosis includes a range of hormonal drugs, such as Danazol, progestogenic agents or GnRH agonists. All of these drugs have some side effects and their success varies between individuals. The Mirena intrauterine system is often an excellent treatment for endometriosis and a related condition called adenomyosis (see below). Alternatively, endometriosis can be surgically removed via a laparoscopy or laparotomy. .

*For adenomyosis:* Adenomyosis is a variant of endometriosis that involves the muscle of the uterus. This causes enlargement of the uterus and painful heavy periods.

*For pelvic inflammatory disease (PID):* PID is an infection of the reproductive organs caused by either a sexually transmitted disease or infection following surgery or childbirth. PID can usually be effectively treated with antibiotics, but recurrent episodes may result in scarring and subsequent pain.

*For cancer:* A hysterectomy is often advised for cancers of the cervix, uterus, or ovaries. However, if the detected cancer is non-invasive, it may be treated with more conservative surgery. For example, hysterectomy is rarely required for pre cancer changes in the cervix (or CIN).

## **Types of Hysterectomy – What will be Removed**

Most women who have a hysterectomy will have a total hysterectomy. But probably no other gynaecological term creates more confusion and concern in the mind of patients!

The womb or uterus is muscular organ about the size of a fist in the non-pregnant state. It is made up of a main



part, called the body and a cervix or neck. This is the portion that opens into the vagina and must dilate to 10 cm during childbirth.

Total hysterectomy refers simply to removal of the uterus with its cervix. Subtotal hysterectomy refers to removal of the womb without its cervix. If the tubes and ovaries are removed the medical term for this is “bilateral salpingo oophorectomy”. This page will therefore simply talk about hysterectomy with or without leaving the cervix and with or without removing ovaries. Radical or Wertheim's hysterectomy involves the removal of the uterus, cervix, ovaries, Fallopian tubes, as well as nearby lymph nodes and the upper portion of the vagina. This is an operation that is performed for uterine cancer.

It is important that women understand the full implications of the removal of certain reproductive organs so that they can be properly prepared for any resulting effects.

### **Removal of Ovaries and or Fallopian Tubes**

Some doctors recommend the removal of the ovaries during a hysterectomy to prevent the possibility of developing ovarian cancer. Although ovarian cancer is often deadly due to its silent nature (it can present no symptoms until an advanced stage), the actual odds of getting ovarian cancer are quite low, affecting approximately one woman in 80 in a lifetime. Therefore, the removal of a woman's healthy ovaries for preventative purposes may be an unnecessary procedure.

For the pre-menopausal woman, the removal of the ovaries will result in a lack of the female hormones oestrogen and progesterone, bringing on a sudden menopause. The drop in hormone levels may cause menopausal-related symptoms such as hot flushes, night sweats and vaginal dryness and also increase the risk of heart disease and osteoporosis. These effects can be averted by the use of hormone replacement therapy (HRT). Although HRT became quite unpopular after the publication of a large US study showed that it increases the risk of breast cancer, heart disease and stroke, it may be important for a woman to use some form of HRT if her ovaries are surgically removed before her menopause, see <http://www.brinsmead.net.au/mdoc/Menopause.pdf>

For both pre and postmenopausal women the removal of the ovaries results in a reduction in testosterone, the male sex hormone. This lack of testosterone may have an adverse effect on women's mood or sexual drive (libido). In a few cases, women who retain their ovaries during a hysterectomy may experience menopause three to four years earlier, or even immediately.

Women who retain their ovaries need to be aware that up to 10% will return for further surgery on their ovaries, usually because of the development of cystic enlargement or ongoing pain. This is sometimes called “the residual ovary syndrome”. This occur more commonly for women who suffer endometriosis, pelvic inflammatory disease, had symptomatic benign ovarian cysts in the past or simply spent a large part of their reproductive life on “the Pill” and are unaccustomed to or intolerant of ovulation.

One very good alternative to the removal of ovaries for cancer prevention is to remove both fallopian tubes during hysterectomy. There is emerging evidence that many, if not all, ovarian cancers actually arise in the adjacent fallopian tubes. These serve no function whatsoever after hysterectomy so it is becoming common practice to remove them during the operation.



## **Removal of the Cervix**

For many years the cervix was routinely removed during most hysterectomies as a precautionary measure, to eliminate the risk of cervical cancer. However, for women at low risk of this condition who are willing to continue with a regular cervical cancer screening program i.e. Pap smears, it is questionable whether the removal of the cervix for this reason is necessary.

It has been postulated that removal of the cervix may interfere with vaginal lubrication and a woman's sexual response. However, well conducted research has failed to confirm a role for the cervix in sexual functioning. Indeed, a number of studies have compared hysterectomy with and without removal of the cervix and the findings can be summarised thus:

“... neither self-image nor sexuality need diminish after hysterectomy. The type of hysterectomy that was performed did not appear to affect (sexual function)”

Up to one woman in six will continue to experience vaginal bleeding if the cervix is left (mini periods). Prolapse of the cervix can occur if it is left behind but prolapse of the vagina can also occur if the cervix is removed. The operation time and blood loss is less if the cervix is not removed and this aspect may become important in certain situations. The complication rates for hysterectomy with or without removal of the cervix are much the same although one study did report more frequent urinary incontinence when the cervix was left.

It is important to be aware that it is not possible to preserve the cervix during a vaginal hysterectomy as the cervix is removed before the rest of the uterus is extracted.

## **After the Operation**

Women may feel nauseous, a side effect of the general anaesthetic, as well as some pain and discomfort in the abdominal region. Drugs to relieve both nausea and pain can be very effective.

There may also be some vaginal discharge or bleeding that persists for a few days and sometimes for a few weeks. The bleeding should not be heavier than the heaviest day of a menstrual period after uncomplicated hysterectomy.

On the first day following surgery women are encouraged to get up and walk around. This exercise is important in avoiding thromboembolism, bowel atony and pulmonary atelectasis.

The time required in hospital varies according to the type of hysterectomy performed and whether any post-operative complications are experienced. Generally, hospitalisation for uncomplicated abdominal hysterectomy is 4-7 days and 3-5 days for vaginal hysterectomy.

## **Abdominal, Vaginal or Laparoscopic Hysterectomy?**

An abdominal hysterectomy is usually required if there is a need for extensive exploration (in the case of cancer), if there is significant endometriosis or adhesions and for recurrent PID or large fibroids. The disadvantages of abdominal hysterectomy are a lengthier hospital stay and longer recovery time. There is also some evidence that suggests that women are more likely to have healthy ovaries removed during an abdominal hysterectomy.

Vaginal hysterectomies are usually performed to treat a prolapsed uterus but it can also be an option for many women particularly if they have previously experienced vaginal birth. The advantages of this



method are the absence of a visible scar and a shorter hospital stay and recovery time. Because vision into the pelvis is limited, diagnosis and treatment of pelvic disease such as endometriosis may be limited. A vaginal hysterectomy may therefore be unsuitable for women with a very large uterus, severe endometriosis and/or pelvic scar tissue.

The use of laparoscopic techniques in hysterectomies has been a part of gynaecological practice since the 1980's. Most commonly performed is the laparoscopically-assisted vaginal hysterectomy (LAVH). A LAVH allows a hysterectomy that previously would have been performed abdominally because of access and viewing requirements, to be converted to a vaginal hysterectomy.

A number of RCTs have compared abdominal, vaginal and laparoscopic hysterectomy. These are summarised in the following tables:

Complication	Abdominal hysterectomy	Vaginal hysterectomy	Laparoscopically assisted vaginal hysterectomy, laparoscopic hysterectomy or total laparoscopic hysterectomy
Blood transfusion (%)	3.33	3.87	4.23
Bowel injury (%)	0.67	0.00	0.20
Vascular injury (%)	0.77	0.94	1.81
Pelvic haematoma (%)	6.00	4.04	3.94
Vaginal cuff infection (%)	2.06	1.93	4.15
Wound abdominal wall infection (%)	7.38	0.00	1.92
Laparotomy (%)	—	2.66	4.17
Urinary tract injury (bladder or urethral) (%)	0.86	1.60	2.33
Bleeding (%)	1.57	0.00	0.37
Urinary tract infection (%)	4.87	1.27	4.77
Chest infection (%)	4.55	6.67	0.56
Infection unspecified (includes febrile morbidity) (%)	13.15	7.73	10.01
Thromboembolism (%)	0.00	0.00	0.59

## Complications

As many as one woman in three will experience a complication with or following their hysterectomy, but most of these are minor. Only about one woman in ten will have a very unpleasant complication. The risk of death arising from the procedure is equivalent to that associated with a pregnancy after the age of 35 years i.e. approximately 1:1000.

The most common complications are postoperative fever and infection. This infection may occur in the abdominal wound (if an abdominal incision was made) or at the vault of the vagina and in the pelvis in the region from where the uterus was removed. This causes pelvic pain, bowel pressure and, sometimes, diarrhoea. The vaginal discharge of infected blood clot can occur for some weeks after such a complication.

A catheter is required in the bladder for 12 – 24 hours after most hysterectomies and longer if a “bladder repair” or prolapse-treating operation was performed. Some women develop a bladder



infection from the catheter and a few have difficulties re establishing normal bladder function after it is removed.

Other problems that can with hysterectomy include haemorrhage leading to weakness and a prolonged recovery period or requiring blood transfusion (approximately 5% of women), damage to surrounding organs i.e. bladder, bowel, blood vessels and nerves, or urinary blockage or leakage (approximately 1% of women). The extent of risk depends upon the type of hysterectomy to be performed and the individual woman's health characteristics.

One woman in 50 or thereabouts will require readmission to hospital within eight weeks of a hysterectomy for problems such as bleeding or wound infection or weakness. About one third of those will require another operation for these complications. Such surgery is usually relatively minor.

A few women develop ongoing pain problems in the abdominal incision (stitch pain or a trigger point) and this can occur after vaginal surgery as well.

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## After Leaving Hospital

The overall time it takes for a woman to recover from a hysterectomy is dependent on the type of hysterectomy performed and the individual person. Generally, women should avoid sexual intercourse, heavy lifting, active sports or any activity that causes undue discomfort for about six to eight weeks. Usually, a post-operative check takes place 3 - 8 weeks after the operation. 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.

## Hormone replacement therapy (HRT)

Pre-menopausal women who have a hysterectomy with removal of both ovaries will undergo an instant



menopause. Unlike the gradual changes experienced by women in natural menopause, these changes are sudden and can therefore be quite distressing. HRT is often recommended as a way of alleviating these symptoms.

HRT usually involves the administration of synthetic versions of oestrogen and progesterone in the form of either implants, pills, creams or patches. Women, who have had their uterus removed, need only oestrogen replacement because progesterone is only prescribed to prevent thickening of the endometrium and associated uterine cancer.

### **Sex after Hysterectomy**

Sexual intercourse is not recommended until the top of the vagina has safely healed i.e. after approximately six to eight weeks. Most women experience an improvement in their sexual experience and satisfaction after hysterectomy. For many whose sex life was inhibited by bleeding or pain their sexuality can be considerably enhanced. However a major sexual problem is unlikely to be fixed by hysterectomy.

For women who have had a vaginal repair with their hysterectomy then narrowing of the vagina may make intercourse difficult or even painful. Any loss of libido following a hysterectomy can usually be attributed to psychological factors, including changes in self-perception and self-confidence. A few women feel less feminine after hysterectomy. In our society, a woman's childbearing ability is sometimes linked to her status as a woman, so that when a woman loses her womb she may suddenly feel unfeminine, even castrated. The loss of menstruation following a hysterectomy may leave these women feeling as though they are no longer 'real' women.

Some women also fear that their partners will see them as being less feminine following a hysterectomy. They worry that their partner will no longer find them attractive, or will think that they are not “a complete woman”. Support and reassurance from a partner is therefore, of great importance to women who are trying to come to terms with the emotional effects of a hysterectomy.

### **Feelings of Grief and Depression**

Depression following hysterectomy appears to be a fairly common occurrence, often linked to related issues such as sexual dysfunction or the end to childbearing. Loss of the uterus can be particularly distressing to women who were either wanting to have their first child, or further children. A hysterectomy signals the end to this possibility. Even for women who previously did not intend to have children, there may be grieving simply for their reproductive capability.

It is important to note that women who have had the time and opportunity to make a well informed decision to have a hysterectomy appear to suffer less from depression following the operation. Women who are rushed into the procedure and who have not had time to come to terms with the various changes that a hysterectomy will bring, are more likely to develop depression. Signs of depression may include severe and prolonged feelings of sadness and hopelessness; diminished interest in activities; significant weight loss or gain; insomnia; fatigue; and thoughts of death or suicide. Women suffering from post-hysterectomy depression should consult either their general practitioner or a counsellor, and may also find a support group helpful.

### **Pap smears after Hysterectomy**

Most women who have had a hysterectomy with removal of the cervix do not require Pap smears or vaginal examinations. Some women however, should continue to have a Pap smear test after their hysterectomy. This includes women for whom:



- the cervix was not completely removed
- previous smear results are not known
- there is a history of cervical intraepithelial neoplasia (CIN) or human papilloma virus (HPV) changes on Pap smear, or genital warts
- there is a history of invasive gynaecological malignancy
- immunosuppression is a problem whether due to disease and/or therapy

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