



cancer of the womb (uterus)

From the JASCAP booklet series

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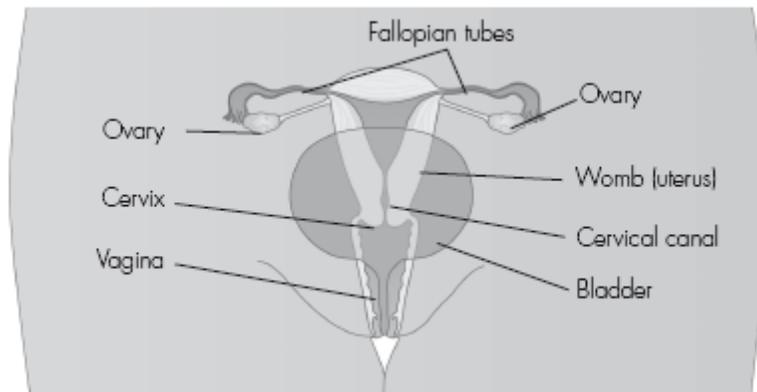
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The womb

The womb, or uterus, is the place in a woman's body where a baby grows before being born. It is a muscular, pear-shaped organ at the top of the vagina. The lining of the womb is called the **endometrium** and is shed each month, as a period. These periods stop temporarily during pregnancy, but will normally continue until a woman has the menopause. Cancer that starts in the womb lining is called **endometrial or womb cancer**.

Cancer that starts in the muscle layers of the womb is called **uterine sarcoma**; this type of cancer is discussed in our booklet about soft tissue sarcomas.



The position of the womb (uterus)

The lower part of the womb is called the cervix, or sometimes 'the neck of the womb'. We have separate information on cancer of the cervix.

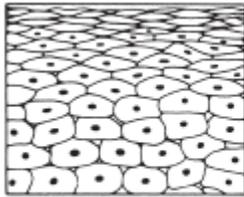
Close to the womb there are collections of lymph nodes. These are small glands, about the size of a bean. The lymph nodes are part of the lymphatic system.

The lymphatic system is part of the immune system – the body's natural defence against infection and disease. It is a complex system made up of organs such as bone marrow, the thymus, the spleen, and lymph nodes. The lymph nodes throughout the body are connected by a network of tiny lymphatic ducts.

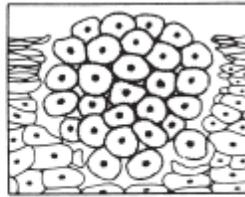
What is cancer?

The organs and tissues of the body are made up of tiny building blocks called cells. Cancer is a disease of these cells.

Cells in different parts of the body may look and work differently but most reproduce themselves in the same way. Cells are constantly becoming old and dying, and new cells are produced to replace them. Normally, cells divide in an orderly and controlled manner. If for some reason the process gets out of control, the cells carry on dividing, developing into a lump which is called a **tumour**.



Normal cells



Cells forming a tumour

Tumours can be either **benign** or **malignant**. Cancer is the name given to a malignant tumour. Doctors can tell if a tumour is benign or malignant by examining a small sample of cells under a microscope. This is called a **biopsy**.

In a benign tumour the cells do not spread to other parts of the body and so are not cancerous. However, if they continue to grow at the original site, they may cause a problem by pressing on the surrounding organs.

A malignant tumour consists of cancer cells that have the ability to spread beyond the original area. If the tumour is left untreated, it may spread into and destroy surrounding tissue. Sometimes cells break away from the original (primary) cancer. They may spread to other organs in the body through the bloodstream or lymphatic system.

The lymphatic system is part of the immune system - the body's natural defence against infection and disease. It is a complex system made up of organs, such as bone marrow, the thymus, the spleen, and lymph nodes. The lymph nodes (or glands) throughout the body are connected by a network of tiny lymphatic ducts.

When the cancer cells reach a new area they may go on dividing and form a new tumour. This is known as a **secondary cancer** or **metastasis**.

It is important to realise that cancer is not a single disease with a single type of treatment. There are more than 200 different kinds of cancer, each with its own name and treatment.

Types of cancer

Carcinomas

The majority of cancers, about 85% (85 in a 100), are carcinomas. They start in the epithelium, which is the covering (or lining) of organs and of the body (the skin). The common forms of breast, lung, prostate and bowel cancer are all carcinomas.

Carcinomas are named after the type of epithelial cell that they started in and the part of the body that is affected. There are four different types of epithelial cells:

squamous cells - that line different parts of the body, such as the mouth, gullet (oesophagus), and the airways

adeno cells - form the lining of all the glands in the body and can be found in organs such as the stomach, ovaries, kidneys and prostate
 transitional cells - are only found in the lining of the bladder and parts of the urinary system
 basal cells - that are found in one of the layers of the skin.

A cancer that starts in squamous cells is called a squamous cell carcinoma. A cancer that starts in glandular cells is called an adenocarcinoma. Cancers that start in transitional cells are transitional cell carcinomas, and those that start in basal cells are basal cell carcinomas.

Leukaemias and lymphomas

These occur in the tissues where white blood cells (which fight infection in the body) are formed, i.e. the bone marrow and lymphatic system. Leukaemia and lymphoma are quite rare and make up about 6.5% (6.5 in 100) of all cancers.

Sarcomas

Sarcomas are very rare. They are a group of cancers that form in the connective or supportive tissues of the body such as muscle, bone and fatty tissue. They account for less than 1% (1 in 100) of cancers.

Sarcomas are split into two main types:

bone sarcomas - that are found in the bones
 soft tissue sarcomas - that develop in the other supportive tissues of the body.

Others forms of cancer

Brain tumours and other very rare forms of cancer make up the remainder of cancers.

Causes of womb cancer

Approximately 6000 women in the UK develop endometrial cancer each year. The exact cause of womb cancer is not yet known. It most commonly occurs in women between the ages of 50 and 64 and after the menopause. Womb cancer rarely affects women under 40.

Being overweight is an important risk factor for developing womb cancer. The more overweight or obese you are, the greater your risk. As many as four out of ten womb cancers may be caused by obesity.

Women who have had their menopause and who take oestrogen-only HRT (hormone replacement therapy) for a long time may have a slightly increased risk of developing the disease. Women who have not had their womb removed and are taking HRT should make sure that they are taking a combination of the hormones oestrogen and progesterone, rather than oestrogen on its own. Taking combined oestrogen and progesterone HRT for up to five years does not increase the risk of developing womb cancer, but if it is taken for more than five years the risk may be slightly increased.

Although most womb cancers are not caused by an inherited faulty gene, in some women they may be. In a small number of families, a gene fault HNPCC (hereditary non-polyposis colorectal cancer) can be present that raises the risk of family members developing bowel or womb cancer.

If you have several close family members who have bowel or womb cancer (especially if these were developed at a young age) this could be due to an inherited faulty gene. If you are worried that other family members may have an increased risk of cancer you can talk to your GP, who can refer you to a family cancer clinic if they think this is necessary.

Some other possible risk factors that may increase the chance of developing womb cancer include:

Taking tamoxifen (a hormonal therapy sometimes taken to treat breast cancer) over a long period of time. The increase in risk from this is so slight, however, that the benefits of taking tamoxifen to treat breast cancer are considered to outweigh the risk.

If you have not had children or been pregnant.

Having had Cowden syndrome or polycystic ovary syndrome.

Women who are still having periods, and who take the contraceptive pill, are believed to have a lower risk of developing womb cancer.

Womb cancer, like other cancers, is not infectious and cannot be passed on to other people.

Symptoms of womb cancer

The most usual early symptom of cancer of the womb is abnormal vaginal bleeding. This may occur as:

bleeding which starts after the menopause (in post-menopausal women)

bleeding between periods

heavier periods than normal (in pre-menopausal women)

abnormal vaginal discharge.

Abnormal vaginal bleeding may be due to many causes other than cancer, but you should always see your GP about it.

Having had a recent normal cervical screening test (smear test) does not mean that you do not have cancer of the womb. A smear test involves a scrape of cells from the surface of the cervix. The cervix is the lower part womb. Occasionally a smear test may show signs of a cancer of the lining of the womb, but this is unusual.

Other symptoms of womb cancer might be:

pain in the lower abdomen (tummy), back or legs

discomfort or pain during sexual intercourse.

How womb cancer is diagnosed

Usually you begin by seeing your GP (family doctor) who will examine you and can arrange for any other tests or x-rays that may be necessary. They may need to refer you to hospital or to a clinic for these tests, and for specialist gynaecological advice and treatment.

You may have one or more of the following tests:

Vaginal ultrasound

Hysteroscopy

Biopsy

Dilatation and curettage (D&C)

Vaginal ultrasound

Sound waves are used to make up a picture of the inside of your womb. It will be done in the hospital scanning department. A small device is gently put into your vagina. The device produces sound waves, which are then converted into a picture by a computer. This may be uncomfortable but should not be painful.

Hysteroscopy

A thin, flexible tube with a light at the end (a hysteroscope) is passed through your vagina into your womb. This allows doctors to look inside the womb and take tissue samples (see biopsy). You may have this test as an outpatient under a local anaesthetic. But sometimes, a general anaesthetic is needed so you may have to stay in hospital overnight.

After a hysteroscopy you may have some bleeding and period-type pains for a day or so, which can be controlled with painkillers.

Biopsy

A small sample of cells may be taken from the lining of your womb by a gynaecologist or specialist nurse. This will be carried out in the outpatients department and you will not need an anaesthetic. A fine tube is passed into the womb, and gentle suction is used to remove a sample of the lining. The sample is sent to the laboratory for examination under a microscope.

Dilatation and curettage (D&C)

You may have a procedure called dilatation and curettage which is carried out under a general anaesthetic. Your cervix is stretched so that the gynaecologist can insert an instrument to remove samples of tissue from the inner lining of the womb. These samples can then be examined under a microscope. After a D&C, most women have period-type pains for a day or so. These can be controlled with painkillers.

Further tests for womb cancer

If the tests show that you have womb cancer, your gynaecologist or surgeon will probably want to do further tests to see if the disease has spread. These tests help the doctor to decide on the best type of treatment for you.

The tests may include:

- Blood tests
- Chest x-ray
- CT scan
- MRI scan

Blood tests

Samples of your blood will be taken to check your general health, the number of cells in your blood (blood count), and to see how well your kidneys are working.

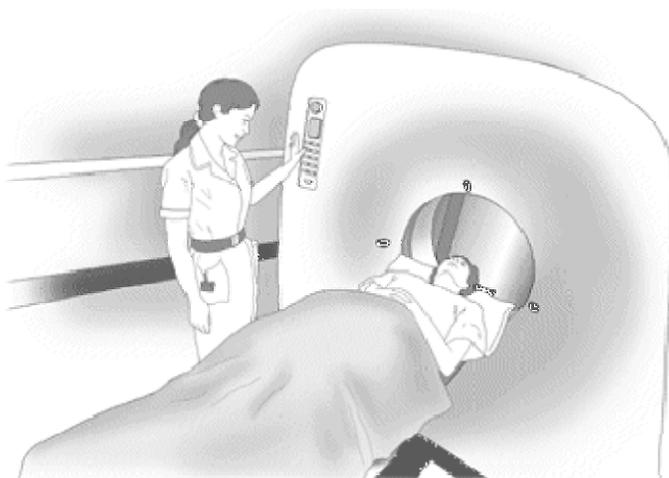
Chest x-ray

This is taken to check that your lungs and heart are healthy.

CT scan

A CT (computerised tomography) scanner takes a series of x-rays which builds up a three-dimensional picture of the inside of the body. The scan is painless but takes longer than an x-ray (from 10-30 minutes). It may be used to find the exact area and size of the cancer, or to check for any spread of the disease. Most people who have a CT scan are given a drink or injection of iodine to allow particular areas to be seen more clearly. For a few minutes this may make you feel hot all over.

If you are allergic to iodine or have asthma, it is important to tell your doctor and the person doing the test before you have the injection or drink. It is usually still possible to have the injection, but you will need to have steroid treatment on the day before, and the day of, the injection.



Having a CT scan

The CT scan is painless but it will mean lying still for about 10–30 minutes. You will probably be able to go home as soon as the scan is over.

MRI scan

An MRI (magnetic resonance imaging) scan is similar to a CT scan but uses magnetism instead of x-rays to build up cross-sectional pictures of your body. Some people are given an injection of dye into a vein in the arm to improve the image.

During the test you will be asked to lie very still on a couch, inside a long chamber, for up to an hour. This can be unpleasant if you don't like enclosed spaces. If so, it may help to mention this to the radiographer. The MRI scanning process is also very noisy, but you will be given earplugs or headphones to wear, and many hospitals will play music for you during the scan. You can take in your own favourite music.

The scanner is a very powerful magnet, so before going into the room you should remove any metal items you may be wearing. People who have heart monitors, heart pacemakers, or certain types of surgical clips cannot have an MRI because of the magnetic fields.

It will probably take several days for the results of your tests to be ready, and this wait will obviously be an anxious time for you. It may help if you can find a close friend or relative to talk things over with. You can also contact us, or another support organisation.

■ Staging and grading womb cancer

Staging
Grading

Staging

The stage of a cancer is a term used to describe its size and whether it has spread beyond the original area where it started. Knowing the extent of the cancer, and the grade, helps your specialist to decide on the most appropriate treatment for you.

Womb cancer is divided into four stages.

Stage 1 womb cancer is contained within the womb only. This stage is divided into three:

Stage 1A The cancer is only in the inner lining (endometrium) of the womb.

Stage 1B The cancer has grown into the muscle wall of the womb, but not more than half way.

Stage 1C The cancer has grown more than half way into the muscle wall.

Stage 2 womb cancer has spread to the cervix. This stage is divided in two:

Stage 2A The cancer has grown into the glands covering the cervix.

Stage 2B The cancer has grown into the muscle of the cervix.

Stage 3 womb cancer is more advanced, but is contained within the pelvis. This stage is divided in three:

Stage 3A The cancer has grown towards the ovaries or cancer cells have spread to the abdomen.

Stage 3B The cancer has spread down into the vagina.

Stage 3C The cancer has spread into nearby lymph nodes.

Stage 4 means the cancer has spread beyond the womb into surrounding organs. This stage is divided in two:

Stage 4A The cancer has spread to the bowel or bladder.

Stage 4B The cancer has spread to other parts of the body such as the lungs, bone or the brain. If the cancer has spread to other parts of the body this is secondary (or metastatic) womb cancer.

Recurrent endometrial cancer is when the cancer comes back some time after initial treatment.

Grading

Grading refers to the appearance of the cancer cells under the microscope. The grade gives an idea of how quickly the cancer may develop. There are three grades:

grade 1 (low-grade)
 grade 2 (moderate-grade)
 grade 3 (high-grade).

Low-grade means that the cancer cells look very like the normal endometrial cells. They usually grow slowly and are less likely to spread.

Moderate-grade means that the cells look more abnormal than low-grade cells.

High-grade means that cells look very abnormal. They are likely to grow more quickly and are more likely to spread.

Treatment for womb cancer

Types of treatment
 Multidisciplinary team
 Giving your consent
 Benefits and disadvantages of treatment
 Making decisions about treatment
 Second opinion

Types of treatment

Most womb cancers are discovered at an early stage (when they have not spread beyond the womb) and may be cured by a hysterectomy (surgical removal of the womb). As this treatment is very successful for many women, further treatment is not normally necessary.

Radiotherapy may be given after the operation, if your surgeon feels that there is any risk of the cancer coming back. Radiotherapy may be used instead of surgery if the cancer cannot be removed surgically, or if you are not fit enough to have an operation. Radiotherapy may be used if the cancer comes back (recurs) in the pelvic area at a later date.

If the cancer has spread to other parts of the body, treatment with a female hormone called progesterone may be able to shrink the cancer and control symptoms. Chemotherapy is also used sometimes for people in this situation, and can help to shrink the cancer and control its growth for a time.

Your treatment will depend on a number of factors, including:

your age
 your general health
 the type of tumour you have
 the stage and the grade of the cancer.

Multidisciplinary team

If your tests show that you have womb cancer, you will be looked after by a **multidisciplinary team**. This is a team of staff who specialise in treating gynaecological cancer and in giving information and support. It will normally include:

gynaecological surgeons
 specialist nurses who give information and support
 oncologists – doctors who have experience in gynaecological cancer treatment using chemotherapy, radiotherapy and hormonal therapy

radiologists who help to analyse x-rays
pathologists who advise on the type and extent of the cancer.

Other staff will also be available to help you if necessary, such as:

physiotherapists
counsellors and psychologists
social workers
dietitians.

Giving your consent

Before you have any treatment, your doctor will explain its aims to you. They will usually ask you to sign a form saying that you give your permission (consent) for the hospital staff to give you the treatment. No medical treatment can be given without your consent, and before you are asked to sign the form you should have been given full information about:

the type and extent of the treatment that you are advised to have
the advantages and disadvantages of the treatment
any other treatments that may be available
any significant risks or side effects of the treatment.

If you do not understand what you have been told, let the staff know straight away so that they can explain again. Some cancer treatments are complex, so it is not unusual for people to need repeated explanations.

It is often a good idea to have a friend or relative with you when the treatment is explained, to help you remember the discussion more fully. You may also find it useful to write down a list of questions before you go to your appointment.

Patients often feel that the hospital staff are too busy to answer their questions, but it is important for you to be aware of how the treatment is likely to affect you. The staff should be willing to make time for you to ask questions.

You can always ask for more time to decide about the treatment if you feel that you can't make a decision when it is first explained to you.

You are also free to choose not to have the treatment. The staff can explain what may happen if you do not have it. It is important to tell a doctor, or the nurse in charge, so that they can record your decision in your medical notes. You do not have to give a reason for not wanting to have treatment, but it can be helpful to let the staff know your concerns so that they can give you the best advice.

Benefits and disadvantages of treatment

Many people are frightened at the idea of having cancer treatments, because of the side effects that can occur. Some people ask what would happen if they did not have any treatment. Although treatments such as radiotherapy can cause side effects, these can usually be well controlled with medicines.

Treatment can be given for different reasons and the potential benefits will vary depending upon the individual situation.

Early-stage womb cancer

In women with early-stage endometrial cancer, surgery is usually done with the aim of curing the cancer and, in most cases, is successful. Sometimes additional treatments such as radiotherapy are given after the surgery to reduce the risks of the cancer coming back.

Advanced womb cancer

If the cancer is at a more advanced stage or has come back (recurred), treatment may only be able to control it, leading to an improvement in symptoms and a better quality of life. However, for some people in this situation, treatment will not have much effect upon the cancer and they will get the side effects with little benefit.

Making decisions about treatment

If you have early-stage cancer and have been offered treatment that aims to cure it, deciding whether or not to accept the treatment may not be difficult. However, if you have more advanced cancer and the treatment is being given to control the cancer for a period of time, it may be more difficult to decide whether to go ahead.

Making decisions about treatment in these circumstances is always difficult, and you may need to discuss in detail with your doctor whether you wish to have treatment. If you choose not to, you can still be given supportive (palliative) care, with medicines to control any symptoms.

Second opinion

Some women find it reassuring to have another medical opinion to help them decide about their treatment. Most doctors will be pleased to refer you to another specialist for a second opinion, if you feel this will be helpful. However, a second medical opinion may take some time to arrange and may delay the start of your treatment, so you need to be sure that it will be helpful to you.

Surgery for womb cancer

The surgical treatment for womb cancer is the removal of the womb (hysterectomy) and is carried out by a gynaecological surgeon. Usually, the fallopian tubes and both ovaries will also be removed. This operation is called a **total hysterectomy with bilateral salpingo-oophorectomy**. Sometimes the lymph nodes close to the womb will also be removed. The reason for this extra surgery is to remove as much of the cancer as possible and to enable the pathologist to see if there are any cancer cells in the lymph glands.

Often it is possible for the gynaecologist to remove all the cancer at this operation so that no further treatment is necessary. However, if the cancer cannot be completely removed your surgeon may recommend you have radiotherapy treatment after the operation. Even if the whole tumour has been removed, radiotherapy is sometimes given to reduce the chance of the cancer coming back. If radiotherapy is necessary, your surgeon will refer you to a **clinical oncologist** (a doctor who specialises in radiotherapy treatment).

- Drips and drains
- Moving around
- Pain
- Going home
- Sex
- Physical activity
- Support

Drips and drains

When you get back to the ward you will have a drip (intravenous infusion) in a vein in your arm until you are able to eat and drink normally. You may have drainage tubes in the wound to stop any excess fluid collecting. These are taken out within a few days. Usually a small tube (catheter) is put into your bladder and urine is drained into a collecting bag.

Moving around

You will be encouraged to start moving about as soon as possible. This is an essential part of your recovery, and even if you have to stay in bed the nurses will encourage you to do regular leg movements to prevent blood clots in your legs. You will also be shown how to do deep-breathing exercises to prevent chest infections. A physiotherapist will help you to do these exercises.

Pain

After your operation you may need regular painkillers, which are very effective at controlling any pain. If you still have pain it is important to let your nurses know as soon as possible, so that your painkillers can be changed to find a type and dose that is more effective for you.

Going home

Most women are ready to go home about four to six days after their operation. If you think you might have problems when you go home – for example, if you live alone or have several flights of stairs to climb – let the ward nurses, or social worker, know as soon as possible so that help can be arranged.

Sex

Although you will no longer have your monthly periods or be able to become pregnant (see our booklet on fertility), you will, when you are ready, be able to be sexually active again. Your surgeon will probably advise you not to have sexual intercourse for at least six weeks after your operation, to allow the wound to heal properly. Many women need more time before they are ready to have a sexual relationship. If you have any questions about these issues, don't be afraid to discuss them with your GP, surgeon, specialist nurse or one of our nurses.

Our booklet on sexuality and cancer discusses ways of dealing with the physical and emotional changes that cancer treatment can cause.

Physical activity

After a hysterectomy it can take time for the abdominal (tummy) muscle and skin to heal. Because of this you will need to avoid strenuous physical activity, or heavy lifting, for about two months. Some women also find it uncomfortable to drive after their operation. It is a good idea to wait a few weeks before you start driving again.

Support

Before you leave hospital, you will be given an appointment to attend an outpatient clinic for your post-operative check-up. This will be a good time to discuss any problems that you may have had since your operation. Some women take longer than others to recover from their operation.

If you find you are having problems, it may be helpful to talk to someone who is not directly associated with your illness. Some women find it very helpful to see a counsellor, and we can give you contact details for counselling services around the country.

Radiotherapy for womb cancer

Radiotherapy treats cancer by using high-energy rays which destroy the cancer cells while doing as little harm as possible to normal cells.

- When it is given
- External radiotherapy
- Planning your treatment
- Treatment sessions
- Skin care
- Internal (intracavity) radiotherapy
- Side effects
- Possible long-term side effects

When it is given

Radiotherapy may be given after surgery, if your doctor feels that there is a risk of the cancer coming back. Radiotherapy may be used instead of surgery if you are not fit enough to have surgery or if the cancer has spread to the area surrounding the womb. It can also be used if the cancer comes back in the pelvic area at a later date. Radiotherapy for womb cancer can be given externally or internally, and often as a combination of the two.

Your clinical oncologist, who plans your treatment, will be able to help you with any problems or concerns you may have.

Our booklet on radiotherapy provides detailed information about this treatment and its side effects.

External radiotherapy

This is given by directing high-energy rays at the area of the cancer. It is usually done at a hospital outpatient clinic each weekday, with a rest at the weekend. The type and length of your treatment will depend on the size and position of the cancer, but it may last a few weeks.

Planning your treatment

To make the radiotherapy as effective as possible, it has to be carefully planned. On your first few visits to the radiotherapy department you will be asked to lie under a large machine called a simulator, which takes CT scans of the area to be treated.

Planning may take a few visits. Marks will be made on your skin to show the radiographer, who gives you your treatment, where the rays are to be directed. Sometimes a few permanent marks may be made on the skin instead of pen marks. These marks are tiny and will be made only with your permission.

Treatment sessions

Before each session of radiotherapy, the radiographer will position you carefully on the couch and make sure you are comfortable. During your treatment, which only takes a few minutes, you will be left alone in the room but you will be able to talk to the radiographer, who will be watching you carefully from the next room.



A radiographer watches on a monitor while treatment is given. You can talk to them by intercom

Radiotherapy is not painful but you do have to be still for a few minutes while your treatment is being given. The treatment will not make you radioactive and it is perfectly safe for you to be with other people, including children, after your treatment.

Skin care

Your skin may become sore in the area being treated. Perfumed soaps, creams or deodorants may irritate the skin and should not be used during the treatment. Your radiographer or nurse can advise you on skin care during this time.

Internal (intracavity) radiotherapy

Internal radiotherapy (often called **brachytherapy**) gives radiation directly to the womb and the area close by. It can be used after surgery if there is a chance that the cancer may come back. For those few women who can't have surgery it may be used as an alternative treatment. Internal radiotherapy can be used on its own or combined with external radiotherapy.

With this treatment, applicators (hollow plastic or metal tubes) are placed into the top of the vagina. These tubes are usually put in position without anaesthetic or under light sedation. But if you still have your womb you may need a general anaesthetic.

Internal radiotherapy gives a high dose of radiation to the area close to the applicator, but only a low dose to tissues and organs more than a few centimetres away. The treatment is given by a machine that delivers radioactive **sources** (small radioactive metal balls) into the applicators.

This treatment can be given at two different speeds – depending on the machine being used. If the machine is a 'low dose-rate' machine, treatment will be given once over several hours or even days as an inpatient. This machine may be called a Selectron®, but other names are used sometimes. If the machine is a 'high dose-rate' machine, then the treatment is delivered in a few minutes as an outpatient but may have to be repeated more than once. Both low dose-rate and high dose-rate

treatments seem to be equally effective.

If a low dose-rate machine is used, you will probably need to be in a separate room, set apart from the main ward and often behind lead shields. You will be asked to stay in bed while the applicator is in place, to make sure that it stays in the correct position. For the same reason, you will have a small tube (catheter) placed into your bladder to drain your urine. If a high dose-rate machine is used, a catheter is not usually needed as the treatment only takes a few minutes.

Visitors may only be allowed to stay for a short time, during which the machine is switched off and the radioactive sources go back into the machine. This is to keep the dose of radioactivity to visitors and hospital staff as low as possible. Children and pregnant women are not encouraged to visit.

You may feel isolated, frightened and possibly depressed at a time when you might want people around you. If you feel like this, you can let the staff looking after you know. It might also be helpful to take in plenty of reading material, a radio and other things to keep you occupied. The isolation only lasts while the applicators are in place. Once they are removed, the radioactivity disappears and it is perfectly safe for you to be with other people.

The applicator will be removed by one of the doctors or nurses on the ward. This can be uncomfortable. You will be given painkillers and occasionally sedation or gas and air (entonox) before the tubes are removed to make the removal easier for you.

Side effects

It is not unusual to have slight discharge once radiotherapy treatment has finished. If it continues or becomes heavy, let your clinical oncologist or specialist nurse know.

Radiotherapy to the pelvic area can cause side effects such as tiredness, diarrhoea and a burning sensation when passing urine. These side effects can be mild or more troublesome, depending on the strength of the radiotherapy dose and the length of your treatment. Your clinical oncologist, or specialist nurse, will be able to tell you what to expect.

Most of these side effects can be treated quite easily with tablets which your clinical oncologist can prescribe. Any side effects should gradually disappear a few weeks after your treatment is over.

It is important to drink plenty of fluids and maintain a healthy diet during your treatment. You may feel slightly sick but this is not common. If you don't feel like eating you can replace meals with nutritious, high-calorie drinks, which are available from most chemists and can be prescribed by your GP. Our booklet on eating well has some helpful hints on how to eat well when you are feeling ill.

During your treatment it is helpful to get as much rest as you can, especially if you have to travel a long way each day. Our coping with fatigue booklet, has helpful tips on dealing with tiredness.

Sometimes radiotherapy causes a narrowing of the vagina, which can make sexual intercourse uncomfortable. Some women become less interested in sex and notice that their vagina is dry. See the section on the effects on your sex life and fertility.

Our information about the possible side effects of pelvic radiotherapy during treatment may also be useful.

Possible long-term side effects

Radiotherapy to the pelvic area can sometimes cause long-term side effects. However, improved planning and treatment techniques have made these long-term effects much less likely.

A small number of people, the bowel or bladder may be permanently affected by the radiotherapy. If this happens, the increased bowel motions and diarrhoea may continue, or you may need to pass urine more often than before. The blood vessels in the bowel and bladder can become more fragile after radiotherapy treatment and this can make blood appear in the urine or bowel movements. This can take many months or years to happen. If you notice any bleeding, let your doctor know so that tests can be carried out and appropriate treatment given.

Some people also find that the radiotherapy affects the lymph glands in the pelvic area and can cause swelling of the legs. This is known as lymphoedema and is an uncommon side effect.

There is more information about possible long-term side effects in our booklet on pelvic radiotherapy in women.

Hormonal treatment for womb cancer

If you have advanced womb cancer your doctor may recommend hormonal treatment with **progesterone**. This may shrink the cancer and control symptoms the cancer may be causing.

Progesterone is a hormone that occurs naturally in women. Artificial progesterone is available as tablets or by injection and can be given by your GP. The most common types are medroxyprogesterone acetate (Provera®) and megestrol (Megace®).

Side effects

Progesterone has very few side effects. Although some women may feel slightly sick, most women find that their appetite increases. This may make them put on some weight. Some women also notice slight muscle cramps.

Chemotherapy for womb cancer

Chemotherapy may be used if the cancer comes back, or has spread to other parts of the body, and does not respond to hormonal treatment. In some people, chemotherapy may help to shrink the cancer and relieve symptoms.

Chemotherapy is the use of anti-cancer (*cytotoxic*) drugs to destroy cancer cells. Some of the chemotherapy drugs that may be used to treat womb cancer are carboplatin, cisplatin, doxorubicin and paclitaxel (Taxol®).

How chemotherapy is given

Side effects

How chemotherapy is given

These chemotherapy drugs are given by injection into a vein (intravenously).

Side effects

Chemotherapy drugs tend to temporarily reduce the number of normal cells in the blood. When your blood count is low you are more likely to get an infection and may tire easily. During chemotherapy your blood will be tested regularly and, if necessary, you will be given antibiotics to treat infection. Blood transfusions may be given if you are anaemic.

Other side effects may include tiredness, feeling sick (nausea), vomiting and hair loss. Nausea and vomiting can now be well controlled with anti-sickness medicines. Some chemotherapy drugs also make the mouth sore and cause small ulcers. Regular mouthwashes are important and the nurses will explain how to use these properly. If you don't feel like eating meals, you can supplement your diet with nutritious drinks or soups. A wide range of these drinks are available and you can buy them at most chemists.

Occasionally, women may have an allergic reaction to a chemotherapy drug, which can be very frightening. Tell your doctor or nurse if you notice any skin rashes and itching, a high temperature, shivering, redness of the face, dizziness, headache, breathlessness, or anxiety and a need to pass urine. Treatment can be given to reduce allergic reactions.

Although these side effects may be hard to bear at the time, they disappear once your treatment is over and your hair will grow back within a few months of finishing chemotherapy. Our booklet on coping with hair loss describes the different options for head coverings.

Some people do not have many side effects. Your doctor will tell you what problems to expect from your treatment.

Our chemotherapy booklet discusses the treatment and its side effects in more detail.

How treatment for womb cancer may affect your sex life and fertility

The treatments for womb cancer may affect your sex life, but many of these effects can be prevented or treated.

- Menopausal symptoms
- Narrowing of the vagina
- Sex after treatment
- Vaginal dilators
- Fertility

Menopausal symptoms

If you have had a hysterectomy and your ovaries have also been removed, or if you have had radiotherapy to the pelvis, you will have menopause symptoms (if you have not yet had the menopause). These can include:

- hot flushes
- dry skin
- dryness of the vagina
- feeling low and anxious
- being less interested in sex for a time.

Many of these symptoms can be eased by hormone creams or tablets, prescribed by your specialist. These replace the hormones that would have been produced by the ovaries. Some doctors do not like to prescribe these hormones due to a theoretical risk that they could cause the cancer to come back, but no studies so far have shown this to be the case.

If dryness of the vagina is a problem, your GP or specialist can prescribe creams or Vagifem® pessaries, or you can buy lubricating gels, such as K-Y Jelly® or Replens®, from the chemist. You, or your partner, can apply the gels or creams directly to the penis or vagina before or during sex.

Narrowing of the vagina

Radiotherapy to the pelvis can make the vagina become narrower and this can make sex difficult or uncomfortable. The key to overcoming this problem is to keep the muscles in the vagina as supple as possible. Hormone creams (available on prescription from your doctor) applied to your vagina can help, but regular sex, or use of a vaginal dilator, is often the easiest and most effective treatment.

Sex after treatment

Many women feel nervous about having sex soon after treatment for cancer, but it is perfectly safe. Sex won't make cancer worse and your partner can't catch cancer from you. Women often find they need to take more time over sex to help the vagina relax. It may also be easier if your partner is very gentle at first, so that your vagina can stretch slowly. Regular, gentle sex will help the vagina to become supple again and you should be able to go back to your usual sex life a few weeks after radiotherapy.

If sex is difficult, you and your partner might find it helps to discuss things with one of your treatment team. Although it might feel embarrassing at first, it can really help to talk things through. Your nurse or doctor will have experience in this area and can advise you about what might help.

Vaginal dilators

Vaginal dilators are usually made of plastic and your nurse or doctor can give a set to you (dilators usually come in sets of different sizes). A dilator needs to be gently and regularly inserted into the vagina to stretch it gradually and prevent narrowing. The nurses or your doctor can show you how to use the dilators and answer any questions. They are used to discussing these issues, so you don't need to feel embarrassed.

Many women find dilators very useful to improve the suppleness of the vagina after radiotherapy, even if they have a regular sexual partner. A dilator can be helpful for women who may have temporarily lost interest in sex due to menopausal symptoms, or who feel nervous about having sex soon after treatment, or who do not have a regular sexual partner.

Fertility

Surgery and radiotherapy for womb cancer will prevent you from being able to have children in the future. Younger women, and those who were hoping to have children or add to their family, may be especially upset if they have needed a hysterectomy, or had radiotherapy that has damaged their ovaries.

Women who have had their menopause may also feel a deep sense of loss after an operation for womb cancer. Some women feel that the removal of their womb takes away part of their womanhood and they feel less feminine. It can help if you allow yourself time to grieve for children you might have had, or to mourn, as the loss of the womb can give many women a feeling of bereavement.

You may find it helpful to talk to a specialist gynaecological oncology nurse, or a counsellor, who is specially trained to listen and offer support.

Follow up after treatment for womb cancer

After your treatment is completed you may need to have regular check-ups at the hospital. Your doctor or specialist nurse will tell you how long you will need to have these. Many women find that they get

very anxious for a while before their appointments. This is natural and it may help to get support from family, friends, or a support organisation during this time.

If you have any problems, or notice any new symptoms in between follow-up appointments, let your doctor know as soon as possible.

For people whose treatment is over apart from regular check-ups, our booklet on adjusting to life after cancer treatment, gives useful advice on how to keep healthy and adjust to life after cancer.

Research - clinical trials for womb cancer

Cancer research trials are carried out to try to find new and better treatments for cancer. Trials that are carried out on patients are known as clinical trials.

Clinical trials may be carried out to:

- test new treatments, such as new chemotherapy drugs, gene therapy or cancer vaccines
- look at new combinations of existing treatments, or change the way they are given, in order to make them more effective or to reduce side effects
- compare the effectiveness of drugs used for symptom control
- find out how cancer treatments work
- see which treatments are the most cost-effective.

Trials are the only reliable way to find out if a different operation, type of chemotherapy, radiotherapy, or other treatment is better than what is already available.

Taking part in a trial

You may be asked to take part in a treatment research trial. There can be many benefits in doing this. Trials help to improve knowledge about cancer and the development of new treatments. You will also be carefully monitored during and after the study. Usually, several hospitals around the country take part in trials.

Blood and tumour samples

Many blood samples and bone marrow or tumour biopsies may be taken to help make the right diagnosis. You may be asked for your permission to use some of your samples for research into cancer. If you are taking part in a trial you may also be asked to give other samples which may be frozen and stored for future use, when new research techniques become available. These samples will have your name removed from them (made anonymous) so you can't be identified.

The research may be carried out at the hospital where you are treated, or it may be at another hospital. This type of research takes a long time, so you are unlikely to hear the results. The samples will, however, be used to increase knowledge about the causes of cancer and its treatment. This research will, hopefully, improve the outlook for future patients.

JASCAP resources

Talking about your cancer

Practical advice and guidance for cancer patients to help them communicate with family, friends, carers and health professionals about emotional and practical issues arising from a diagnosis of cancer and cancer treatment.

Talking to children about cancer

Practical advice and guidance to help parents with cancer talk to their children about their cancer.

Talking to someone with cancer

Practical advice and guidance for friends, carers and family members to help them talk to their friend or relative with cancer, and provide emotional and practical support.

Note: JASCAP has booklets on each of the above subjects.