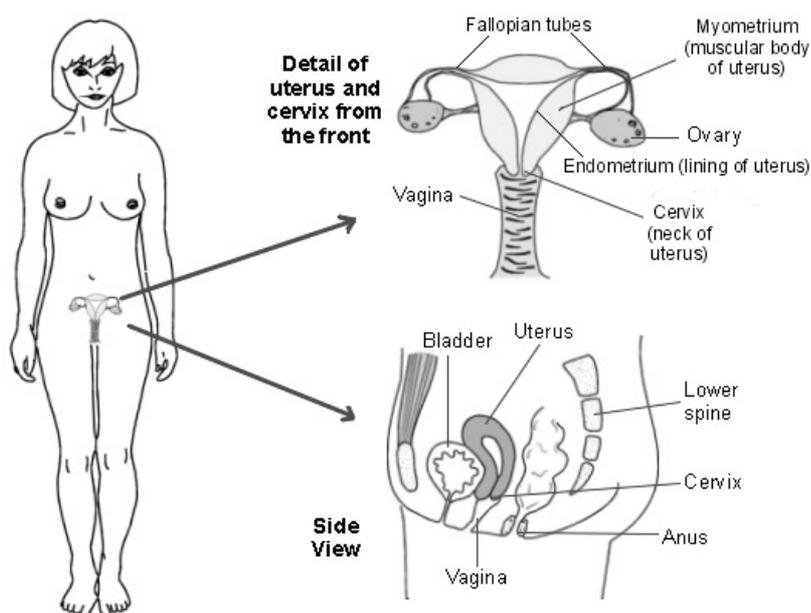


Uterine (Endometrial) Cancer

Most cases of uterine cancer (cancer of the uterus or womb) arise from the inside lining of the uterus (the endometrium). This is called endometrial cancer. The most common early symptom is abnormal vaginal bleeding. Most cases develop in women aged in their 50s or 60s. If endometrial cancer is diagnosed at an early stage, there is a good chance of a cure.

What is the uterus?

The uterus (womb) is in the lower abdomen behind the bladder. The inside of the uterus is where a baby grows if you become pregnant. The inside lining of the uterus is called the endometrium. This builds up and is then shed each month as a period in women who have not yet gone through the menopause. The thick body of the uterus is called the myometrium and is made of specialised muscle tissue.



The lowest part of the uterus is called the cervix (the neck of the womb) which pushes just into the top part of the vagina. At the top of the womb are the right and left Fallopian tubes which carry the eggs (released from the ovaries) to inside the womb.

What is cancer?

Cancer is a disease of the cells in the body. The body is made up from millions of tiny cells. There are many different types of cell in the body, and there are many different types of cancer which arise from different types of cell. What all types of cancer have in common is that the cancer cells are abnormal and multiply out of control.

A malignant tumour is a lump or growth of tissue made up from cancer cells which continue to multiply. Malignant tumours invade into nearby tissues and organs which can cause damage.

Malignant tumours may also spread to other parts of the body. This happens if some cells break off from the first (primary) tumour and are carried in the bloodstream or lymph channels to other parts of the body. These small groups of cells may then multiply to form secondary tumours (metastases) in one or more parts of the body. These secondary tumours may then grow, invade and damage nearby tissues, and spread again.

Some cancers are more serious than others. Some are more easily treated than others (particularly if diagnosed at an early stage). Some have a better outlook (prognosis) than others. In each case it is important to know exactly what type of cancer has developed, how large it has become, and whether it has spread. This will enable you to get reliable information on treatment options and outlook.

See separate leaflet called [Cancer - what are cancer and tumours?](#) for more details about cancer in general.

What is uterine cancer?

Most uterine cancers develop from cells in the endometrium (endometrial cancer). Cancer developing from muscle cells in the myometrium (uterine sarcomas) are rare and are not dealt with further in this leaflet. [Cervical cancer](#) (cancer of the cervix) is quite different to uterine cancer and is dealt with in a separate leaflet.

The rest of this leaflet deals only with endometrial cancer of the uterus.

Endometrial cancer

About 7,400 women in the UK develop endometrial cancer each year. Most cases develop in women aged in their 50s and 60s. It rarely develops in women under the age of 50.

Type and grade of endometrial cancer

Most cases of endometrial cancer are called endometrioid adenocarcinomas. These arise from cells which form the glandular tissue in the lining of the endometrium. A sample of cancer tissue can be looked at under the microscope. By looking at certain features of the cells the cancer can be graded.

- Grade 1 (low grade) - the cells look reasonably similar to normal endometrial cells. The cancer cells are said to be well differentiated. The cancer cells tend to grow and multiply quite slowly and are not so aggressive.
- Grade 2 - is a middle grade.
- Grade 3 - the cells look very abnormal and are said to be poorly differentiated. The cancer cells tend to grow and multiply quite quickly and are more aggressive.

There are also some rarer types of endometrial cancer.

What causes endometrial cancer?

A cancerous tumour starts from one abnormal cell. The exact reason why a cell becomes cancerous is unclear. It is thought that something damages or alters certain genes in the cell. This makes the cell abnormal and multiply out of control. See separate leaflet called [What causes cancer?](#) for more details.

There are risk factors which are known to increase the risk of endometrial cancer developing. These include the following:

- **Increased exposure to oestrogen.** Oestrogen is the main female hormone. Before the **menopause** the changing level of oestrogen together with another hormone, progesterone, cause the endometrium to build up each month and then be shed as a period. It is thought that factors which lead to prolonged higher than usual levels of oestrogen, or increased levels of oestrogen not being balanced by progesterone, may somehow increase the risk of endometrial cells becoming cancerous. These include:
 - If you have never had a baby. This is because your womb has never had a rest from the rise of oestrogen that happens in the course of a normal monthly cycle.
 - If you are **overweight** or obese. This is because fat cells make a certain amount of oestrogen.
 - If you have certain rare oestrogen-producing tumours.
 - If you have a late menopause (after the age of 52) or started periods at a young age. This is because you will have more monthly menstrual cycles.
- **Endometrial hyperplasia.** This is a benign (non-cancerous) condition where the endometrium builds up more than usual. It can cause heavy periods or irregular bleeding after the menopause. Most women with this condition do **not** develop cancer, but the risk is slightly increased.
- **Tamoxifen.** This is a drug which is used in the treatment of breast cancer. The risk of developing endometrial cancer from tamoxifen is very small - about 1 in 500. However, the benefits of taking tamoxifen usually outweigh the risks.
- **Diabetes.** There is a small increased risk in women with diabetes.
- **Polycystic ovary syndrome.** There is a very slight increased risk in women with this condition.
- **Diet.** There are much fewer cases of endometrial cancer in certain eastern countries and dietary factors may be the reason. A western diet high in fat may be a contributing factor.
- **Genetic factors.** Most cases are **not** due to genetic or hereditary factors. However, in a small number of cases, a faulty gene (which can be inherited) may trigger the disease. This disorder is called hereditary nonpolyposis colon cancer (HNPCC).

Women who take the combined oral contraceptive pill have a lower risk of developing endometrial cancer.

What are the symptoms of endometrial cancer?

In most cases the first symptom to develop is abnormal vaginal bleeding such as:

- Vaginal bleeding past the menopause. This can range from spotting to more heavy bleeds. This is the most common symptom of endometrial cancer.
- Bleeding after having sex (postcoital bleeding).
- Bleeding between normal periods (intermenstrual bleeding) in women who have not gone through the menopause.

Early symptoms that occur in some cases are: pain during or after having sex, vaginal discharge, and pain in the lower abdomen.

All of the above symptoms can be caused by various other common conditions. However, if you develop any of these symptoms, you should see your doctor.

Note: a cervical screening test does not screen for endometrial cancer.

In time, if the cancer spreads to other parts of the body, various other symptoms can develop.

How is endometrial cancer diagnosed and assessed?

To confirm the diagnosis

A doctor will usually do a vaginal examination if you have symptoms which may be due to endometrial cancer. He or she may feel an enlarged uterus. It is likely you will need to have a further test to confirm the diagnosis - usually one of the following:

- **Ultrasound scan** of the uterus. This is usually the first test that is done. An ultrasound scan is a safe and painless test which uses sound waves to create images of organs and structures inside your body. It is most commonly used in pregnant women. The probe of the scanner may be placed on your abdomen to scan the womb. Sometimes a small probe is also placed inside the vagina to scan the uterus from this angle.
- Endometrial sampling. This is where a thin tube is passed into the uterus. By using very gentle suction, small samples of the endometrium can often be obtained. This is done in the outpatient clinic, without an anaesthetic. The biopsy (sample) is looked at under the microscope to look for any abnormal cancer cells.
- **Hysteroscopy**. This is where a doctor uses a hysteroscope, which is a thin telescope that is passed through the cervix into the uterus. The doctor can see the lining of the uterus and take biopsies (samples) of abnormal-looking areas. This can also be done without an anaesthetic.

Assessing the extent and spread

If endometrial cancer is confirmed then further tests may be advised to assess if the cancer has spread. For example, a **CT scan**, an **MRI scan**, a chest **X-ray**, blood tests, an examination under anaesthetic of the uterus, bladder or rectum, or other tests. (See separate leaflets which describe most of these tests in more detail.) This assessment is called staging of the cancer. The aim of staging is to find out:

- How much the tumour has grown, and whether it has grown to other nearby structures such as the cervix, bladder or rectum.
- Whether the cancer has spread to local lymph glands (nodes).
- Whether the cancer has spread to other areas of the body (metastasised).

Finding out the stage of the cancer helps doctors to advise on the best treatment options. It also gives a reasonable indication of outlook (prognosis).

See separate leaflet called **Staging and grading cancer** for details.

What are the treatment options for endometrial cancer?

Surgery is the main treatment for endometrial cancer. Radiotherapy or chemotherapy are also used in some circumstances. The treatment advised for each case depends on various factors such as the stage of the cancer (how large the cancer is and whether it has spread) and your general health.

You should have a full discussion with a specialist who knows your case. They will be able to give the pros and cons, likely success rate, possible side-effects and other details about the various possible treatment options for your type of cancer. You should also discuss with your specialist the aims of treatment. For example:

- In some cases, treatment aims to cure the cancer. Most cases of endometrial cancer are diagnosed at an early stage. There is a good chance of a cure if it is treated in the early stages. (Doctors tend to use the word remission rather than the word cured. Remission means there is no evidence of cancer following treatment. If you are in remission, you may be cured. However, in some cases a cancer returns months or years later. This is why doctors are sometimes reluctant to use the word cured.)
- In some cases, treatment aims to control the cancer. If a cure is not realistic, with treatment it is often possible to limit the growth or spread of the cancer so that it progresses less rapidly. This may keep you free of symptoms for some time.
- In some cases, treatment aims to ease symptoms. For example, if a cancer is advanced then you may require treatments such as painkillers or other treatments to help keep you free of pain or other symptoms. Some treatments may be used to reduce the size of a cancer, which may ease symptoms such as pain.

Surgery

An operation to remove the uterus (**hysterectomy**) and ovaries is a common treatment. It is common for the Fallopian tubes and both ovaries to be removed as well. Many operations are now performed laparoscopically (key-hole). If the cancer is at an early stage and has not spread, then surgery alone can be curative.

If the cancer has spread to other parts of the body, surgery may still be advised, often in addition to other treatments. Even if the cancer is advanced and a cure is not possible, some surgical techniques may still have a place to ease symptoms - for example, to relieve a blockage of the bowel or urinary tract which has been caused by the spread of the cancer.

Radiotherapy

Radiotherapy is a treatment which uses high-energy beams of radiation which are focused on cancerous tissue. This kills cancer cells or stops cancer cells from multiplying. (See separate leaflet called **Radiotherapy** for more details.) Radiotherapy alone can be curative for early-stage endometrial cancer and may be an alternative to surgery. In some cases radiotherapy may be advised in addition to surgery.

Even if the cancer is advanced and a cure is not possible, radiotherapy may still have a place to ease symptoms. For example, radiotherapy may be used to shrink secondary tumours which have developed in other parts of the body and are causing pain.

Chemotherapy

Chemotherapy is a treatment of cancer using anti-cancer drugs. They kill cancer cells, or stop them from multiplying. See separate leaflet called **Chemotherapy with cytotoxic medicines** for more details. Chemotherapy is not a standard treatment for endometrial cancer but may be given in certain situations (usually in addition to radiotherapy or surgery).

Hormonal treatments

Treatment with progesterone is used in some types of endometrial cancer. It is generally not used in the initial treatments, but may be considered if the cancer spreads or comes back after those treatments.

What is the outlook (prognosis)?

There is a good chance of a cure if endometrial cancer is diagnosed and treated when the disease is at an early stage. This is when the cancer is confined to the uterus and has not spread. Many cases are diagnosed at an early stage because abnormal vaginal bleeding often develops at an early stage of the disease and alerts women (and their doctors) to the possibility of cancer. For women who are diagnosed when the cancer has already spread, a cure is less likely but still possible. Even if a cure is not possible, treatment can often slow down the progression of the cancer.

The treatment of cancer is a developing area of medicine. New treatments continue to be developed and the information on outlook above is very general. The specialist who knows your case can give more accurate information about your particular outlook, and how well your type and stage of cancer are likely to respond to treatment.

Further help and information

Macmillan Cancer Support

Tel (Helpline): 0808 808 0000 Web: www.macmillan.org.uk
Provide information and support to anyone affected by cancer.

CancerHelp UK

Web: <http://cancerhelp.cancerresearchuk.org/type/womb-cancer/> provides facts about cancer, including treatment choices.

Other support groups

See thePatient.co.uk **support directory** for a list of self-help and support groups for cancer patients.

Further reading & references

- **Endometrial cancer: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up**; European Society for Medical Oncology (2011)
- **Sahdev A**; Imaging the endometrium in postmenopausal bleeding. *BMJ*. 2007 Mar 24;334(7594):635-6.
- **Dimitraki M, Tsikouras P, Bouchlariotou S, et al**; Clinical evaluation of women with PMB. Is it always necessary an endometrial Arch Gynecol Obstet. 2011 Feb;283(2):261-6. Epub 2010 Aug 4.
- **Palomba S, Falbo A, Mocciano R, et al**; Laparoscopic treatment for endometrial cancer: a meta-analysis of randomized controlled trials (RCTs). *Gynecol Oncol*. 2009 Feb;112(2):415-21. Epub 2008 Oct 29.
- **Fiorelli JL, Herzog TJ, Wright JD**; Current treatment strategies for endometrial cancer. *Expert Rev Anticancer Ther*. 2008 Jul;8(7):1149-57.

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