CONDITION

Uterine cancer

Uterine cancer is cancer that begins in the lining or other tissues of the uterus.

WHAT IT IS
Cancer beginning in the uterus

BODY SYSTEM
Reproductive system

MAIN SYMPTOMS
Abnormal vaginal bleeding, unusual discharge, pelvic pain

WHAT CAUSES IT
DNA changes, usually acquired; sometimes inherited

HOW IT IS DIAGNOSED
Tissue biopsy or surgery showing cancer cells

MAIN TREATMENT
Surgery, sometimes radiation or drug treatment

CAN IT BE CURED?
Sometimes - early-stage cancers are often curable

IS IT AN EMERGENCY?
Sometimes - heavy bleeding with fainting

LONG-TERM OUTLOOK
Often good when found before spreading

Overview

Uterine cancer begins in the uterus, also called the womb. The uterus is a hollow, muscular organ in the pelvis where a pregnancy can develop.

Most uterine cancers start in the endometrium, the inner lining of the uterus. These are called endometrial cancers. The most common type is endometrioid cancer.

A smaller group, called uterine sarcomas, starts in the muscle or supporting tissues of the uterus. Sarcomas can behave differently from endometrial cancer and may need different treatment.

Uterine cancer matters because it can grow into nearby tissues or spread to other parts of the body. However, abnormal vaginal bleeding often provides an early warning. Many uterine cancers are found while still limited to the uterus, when treatment is more likely to be

successful.

Abnormal bleeding does not automatically mean cancer. Fibroids, polyps, hormonal changes and other conditions can cause similar symptoms. Testing is needed to find the cause.

Symptoms

Abnormal vaginal bleeding is the most common symptom of endometrial cancer. Any vaginal bleeding after menopause should be assessed, even if it happens only once or is a small amount.

Before menopause, possible symptoms include:

Later symptoms can include persistent abdominal or pelvic pain, a swollen abdomen, reduced appetite, unexplained weight loss or increasing tiredness. These symptoms have many possible causes and do not confirm cancer.

Uterine sarcoma may cause abnormal bleeding, pelvic pain or a lump or feeling of fullness in the lower abdomen. Fibroids, which are non-cancerous growths in the uterus, can cause the same symptoms and are much more common.

- Bleeding between periods
- Periods that become unusually heavy, long or irregular
- Watery, pink, brown or blood-stained vaginal discharge
- Pelvic pressure or pain

Causes and risk factors

Uterine cancer develops when changes in a cell's DNA cause it to grow and divide without normal control. These changes usually build up during life. In some people, an inherited genetic change contributes to the risk.

Many endometrial cancers are linked to prolonged exposure to estrogen without enough progesterone to balance its effects on the uterine lining. Estrogen and progesterone are hormones involved in the menstrual cycle.

Factors associated with a higher risk include:

Having one or more risk factors does not mean that you will develop uterine cancer. Some people diagnosed with it have no clear risk factor.

Lynch syndrome is caused by an inherited problem with DNA repair. It raises the risk of

endometrial cancer, colorectal cancer and several other cancers. A strong family history of these cancers, especially at younger ages, may lead to genetic counselling and testing.

- Increasing age, especially after menopause
- Obesity, because body fat can increase estrogen levels
- Menstrual cycles that occur without regular ovulation
- Never having been pregnant
- Starting periods early or reaching menopause later
- Estrogen treatment without progesterone in someone who still has a uterus
- Tamoxifen, a medicine used to treat or prevent some breast cancers
- Previous radiation treatment to the pelvis
- A history of endometrial overgrowth called endometrial hyperplasia
- Lynch syndrome or certain other inherited cancer syndromes

Diagnosis

Assessment usually begins with questions about bleeding, menstrual history, menopause, medicines and family history. A pelvic examination may also be offered.

A transvaginal ultrasound uses a narrow ultrasound probe placed in the vagina to create images of the uterus. It can measure the thickness of the endometrium and look for growths. Ultrasound can show that more testing is needed, but it cannot usually confirm cancer.

Confirmation requires examination of tissue under a microscope. Tissue may be collected through:

A cervical screening test, sometimes called a Pap test, does not screen for uterine cancer.

If cancer is found, laboratory testing identifies its type and grade. Grade describes how abnormal the cells look and helps estimate how quickly the cancer may behave. Molecular tests look for specific changes in the cancer cells that may affect outlook or treatment.

Imaging such as MRI, CT or PET scanning may be used to check the extent of the cancer. Its stage describes whether it remains in the uterus or has spread elsewhere. For many people, the final stage is established after surgery.

- An endometrial biopsy, using a thin tube passed through the cervix
- Hysteroscopy, in which a small camera is passed into the uterus

- Dilation and curettage, a procedure that removes tissue from the uterine lining
- Surgery, particularly when a suspected sarcoma is difficult to sample safely

Treatment and management

Treatment is based on the cancer's type, stage, grade and molecular features, as well as your general health and preferences. Endometrial cancer and uterine sarcoma are treated differently, so specialist review is important.

Surgery is the main treatment for many uterine cancers. It usually involves removing the uterus and cervix, called a total hysterectomy, along with the fallopian tubes and ovaries. Sentinel lymph node assessment or removal of selected lymph nodes may be used to check for spread.

Other treatments include:

Some people need surgery alone. Others receive radiation or drug treatment after surgery to lower the chance of recurrence. Cancer that has spread or returned may be treated with chemotherapy, immunotherapy, targeted therapy, hormone therapy or a combination.

Fertility-preserving hormone treatment may be considered for a small, carefully selected group with low-grade endometrioid cancer limited to the uterine lining. It requires specialist assessment and repeated biopsies because the cancer may persist or return. It is not suitable for most uterine cancers.

Supportive care can help with pain, fatigue, nausea, menopause symptoms, sexual concerns and emotional distress at any stage.

- Radiation therapy: High-energy radiation directed at the pelvis or placed inside the vagina, called brachytherapy
- Chemotherapy: Medicines that travel through the bloodstream to destroy cancer cells
- Hormone therapy: Treatment that blocks or changes hormone signals used by some cancers
- Immunotherapy: Medicines that help the immune system recognise and attack certain cancer cells
- Targeted therapy: Medicines directed at particular features or pathways in the cancer

Complications

Uterine cancer can grow into the cervix, ovaries or nearby pelvic tissues. It can also spread through lymph nodes or the bloodstream, sometimes reaching the lungs, liver, bones or other areas. The chance of spread differs greatly between cancer types and stages.

Treatment can cause short-term effects such as pain, fatigue, bowel changes, bladder irritation or nausea. Removing the uterus ends the ability to carry a pregnancy. Removing ovaries before natural menopause causes surgical menopause.

Other possible long-term effects include vaginal dryness or narrowing after radiation, changes in sexual comfort, and swelling of a leg or the genital area from lymph fluid buildup. This swelling is called lymphedema.

Cancer may return after treatment. New bleeding, persistent pelvic or abdominal pain, unexplained weight loss, a lasting cough or increasing shortness of breath should be reported rather than waiting for the next planned visit.

Prevention

Uterine cancer cannot always be prevented. Age, inherited genetic changes and many naturally occurring hormone patterns cannot be changed.

Maintaining a weight that is healthy for you may reduce risk, although weight is only one factor and does not fully explain who develops cancer. Regular activity and management of conditions such as diabetes can support overall health.

If you use systemic estrogen after menopause and still have a uterus, your clinician will usually consider whether progesterone is also needed to protect the endometrium. Do not start, stop or change hormone treatment or tamoxifen without discussing its benefits and risks with the clinician who prescribed it.

Combined hormonal contraceptives are associated with a lower future risk of endometrial cancer, but they are not suitable for everyone and are not prescribed only for cancer prevention in most people.

People with Lynch syndrome may be offered regular specialist review and may consider risk-reducing removal of the uterus and ovaries after completing their family. These are personal decisions that require genetic and gynecologic counselling.

There is no routine uterine cancer screening test for people at average risk. Paying attention to abnormal bleeding allows symptoms to be investigated promptly.

Living with it and what to expect

Recovery after surgery often takes several weeks. Energy, bowel habits and physical comfort usually improve gradually rather than all at once. Radiation or drug treatments may extend the recovery period.

Follow-up is more frequent during the first years after treatment, when recurrence is more likely, and becomes less frequent over time. Visits usually focus on new symptoms, recovery and examination. Imaging or blood tests may be used when symptoms, examination findings or the original cancer's features make them useful.

Many people treated for cancer confined to the uterus return to work, exercise, relationships and usual daily activities. Some continue to manage fatigue, menopause symptoms, fertility loss, sexual changes or fear of recurrence. Rehabilitation, pelvic floor care, menopause support and counselling may help.

The long-term course is less predictable when cancer is aggressive, has spread or returns. Treatment may still shrink or control it for a time and relieve symptoms. Palliative care can be given alongside cancer treatment to support comfort, function and quality of life; it is not limited to the final stage of life.

Keep a record of your cancer type, stage, treatments and follow-up plan. Tell other healthcare professionals about any lymph nodes removed, pelvic radiation or treatment-related menopause.

When to get medical help

Arrange a prompt medical assessment if you have:

These symptoms usually have causes other than cancer, but they should not be ignored.

If you have completed treatment, contact your cancer team promptly about new bleeding, persistent pelvic or abdominal pain, unexplained weight loss, a lasting cough or increasing breathlessness. This is different from routine follow-up and should not wait for the next scheduled appointment.

Seek emergency help for very heavy bleeding accompanied by fainting, severe weakness, confusion, chest pain or difficulty breathing. Sudden breathlessness or chest pain during or after cancer treatment can also be a sign of a blood clot and needs emergency assessment.

- Any vaginal bleeding after menopause
- Bleeding between periods or a major unexplained change in periods

- Persistent blood-stained or watery vaginal discharge
- Ongoing pelvic pain, pressure or abdominal swelling

Common questions

Is uterine cancer the same as endometrial cancer?

Not exactly. Endometrial cancer begins in the uterine lining and makes up most uterine cancers. Uterine sarcoma begins in muscle or supporting tissue and is less common.

Can uterine cancer be cured?

Sometimes. Cancer limited to the uterus is often curable with surgery, with or without additional treatment. Cure becomes less likely after spread, but treatment may still control the cancer and ease symptoms.

Does bleeding after menopause always mean cancer?

No. Thinning of vaginal tissues, polyps and other non-cancerous conditions can cause bleeding. However, every episode of bleeding after menopause needs medical assessment.

Can an ultrasound rule out uterine cancer?

Not by itself. Ultrasound can show the thickness and structure of the uterine lining. A biopsy is usually needed when cancer remains a concern because only tissue examination can confirm the diagnosis.

Will I need chemotherapy?

Not everyone does. The need for chemotherapy is based on the cancer's type, stage, grade and molecular features. Many early endometrial cancers are treated with surgery alone or surgery followed by radiation.

Can uterine cancer come back after a hysterectomy?

Yes, although the risk differs between cancers. A recurrence can develop in the vagina, pelvis, lymph nodes or a more distant organ. Follow-up and prompt assessment of new symptoms remain important after surgery.

Sources

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