Endometrial (Uterine) Cancer Overview

The information that follows is an overview of this type of cancer. It is based on the more detailed information in our document *Endometrial* (*Uterine) Cancer*. This document and other information can be obtained by calling 1-800-227-2345 or visiting our website at www.cancer.org.

What is cancer?

The body is made up of trillions of living cells. Normal body cells grow, divide to make new cells, and die in an orderly way. During the early years of a person's life, normal cells divide faster to allow the person to grow. After the person becomes an adult, most cells divide only to replace worn-out, damaged, or dying cells.

Cancer begins when cells in a part of the body start to grow out of control. There are many kinds of cancer, but they all start because of this out-of-control growth of abnormal cells.

Cancer cell growth is different from normal cell growth. Instead of dying, cancer cells keep on growing and form new cancer cells. These cancer cells can grow into (invade) other tissues, something that normal cells cannot do. Being able to grow out of control and invade other tissues are what makes a cell a cancer cell.

In most cases the cancer cells form a tumor. But some cancers, like leukemia, rarely form tumors. Instead, these cancer cells are in the blood and bone marrow.

When cancer cells get into the bloodstream or lymph vessels, they can travel to other parts of the body. There they begin to grow and form new tumors that replace normal tissue. This process is called *metastasis* (muh-**tas**-tuh-sis).

No matter where a cancer may spread, it is always named for the place where it started. For instance, breast cancer that has spread to the liver is still called breast cancer, not

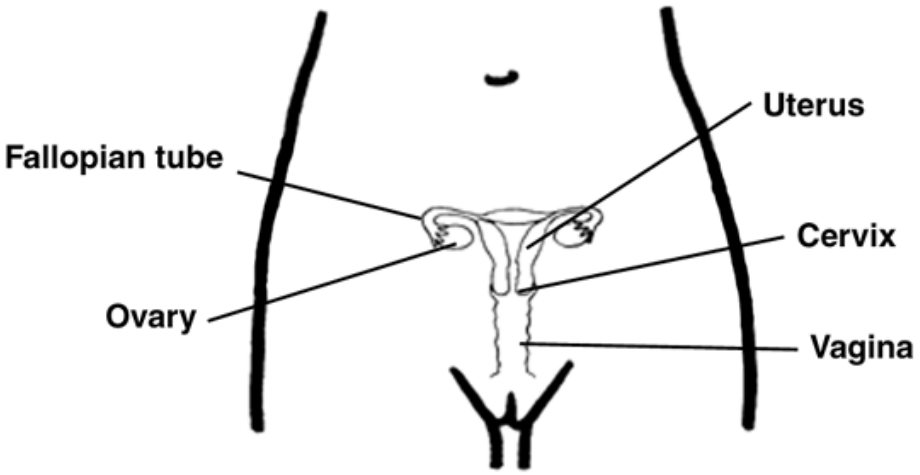
liver cancer. Likewise, prostate cancer that has spread to the bone is called metastatic prostate cancer, not bone cancer.

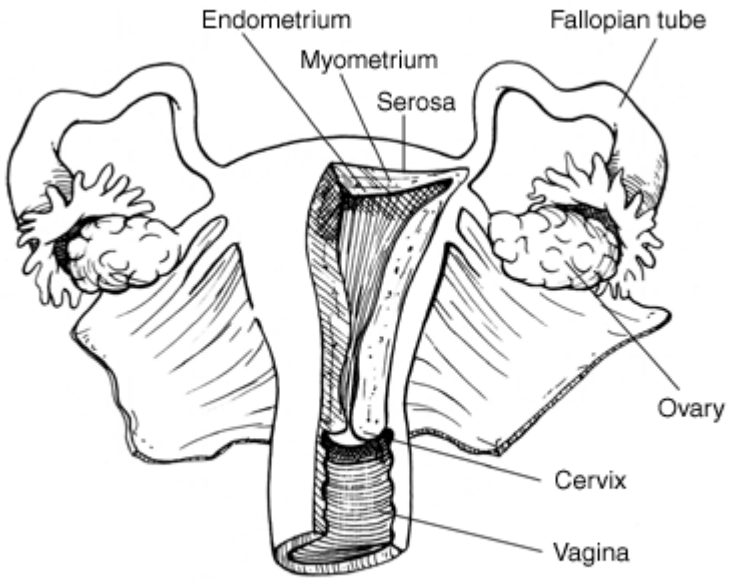
Different types of cancer can behave very differently. For example, lung cancer and breast cancer are very different diseases. They grow at different rates and respond to different treatments. That is why people with cancer need treatment that is aimed at their own kind of cancer.

Not all tumors are cancerous. Tumors that aren't cancer are called *benign* (be-**nine**). Benign tumors can cause problems-- they can grow very large and press on healthy organs and tissues. But they cannot grow into other tissues. Because of this, they also can't spread to other parts of the body (metastasize). These tumors are almost never life threatening.

What is endometrial cancer?

Endometrial cancer is a cancer that starts in the inner lining of the womb (uterus). This lining is called the *endometrium*. The pictures below show where the uterus is found and then provide a closer look at the uterus.





The uterus (womb) is a hollow organ, about the size and shape of a medium-sized pear. The uterus is where a fetus grows when a woman is pregnant. It has 2 main parts. The lower part, which extends into the vagina, is called the *cervix*. The upper part is the body of the uterus (also called the *corpus)*. The body of the uterus has 2 layers. The inner layer is the *endometrium*. The outer layer of muscle is known as the *myometrium*. This thick layer of muscle is needed to push the baby out during birth. The tissue coating the outside of the uterus is the *serosa*.

During a woman's menstrual cycle this inner layer changes. In the early part of the cycle it gets thicker in case the woman becomes pregnant. If she does not become pregnant, the tissue is shed from the uterus and becomes the menstrual flow (period). This cycle repeats throughout a woman's life until change of life (menopause).

Types of cancers of the uterus and endometrium

Nearly all cancers of the uterus start in the endometrium. They are called *endometrial carcinomas.* Cancers can also start in the muscle layer of the uterus. These cancers belong to the group of cancers called *sarcomas*.

Cancers that start in the cervix are different from cancers that start in the body of the uterus. They are described in our document *Cervical Cancer*.

Carcinomas

Cancers that start in the cells that line organs in the body are called carcinomas. Most endometrial cancers are not just carcinomas they are *adenocarcinomas*. This is a type of carcinoma that starts in the cells lining glands – such as the glands that line the uterus. The most common type of adenocarcinoma of the uterus is called *endometrioid adenocarcinoma*. There are other types that are far less common.

The *grade* of an endometrioid adenocarcinoma is based on how much the cancer cells form glands that look like the glands found in normal, healthy endometrium. In lower-grade cancers (grades 1 and 2), more of the cancer cells form normal-looking glands. In higher-grade cancers (grade 3), more of the cancer cells are kind of jumbled up and do not form normal glands. Higher grade cancers tend to grow faster and are more likely to spread than lower grade cancers.

Uterine carcinosarcoma (CS) is another cancer that starts in the endometrium and is covered here. When looked at under the microscope, this cancer looks like both endometrial carcinoma and sarcoma. It acts much like a high grade adenocarcinoma and is treated much the same way.

Uterine sarcomas

Less common uterine cancers that do not come from glandular tissue of the endometrium are called *uterine sarcomas*. These types of cancer are not covered here because their treatment and outlook for survival are different from the most common cancers of the endometrium. If you would like to know more about this type of cancer please see our document called *Uterine Sarcoma*.

How many women get endometrial cancer?

The American Cancer Society's estimates for uterus cancer (both endometrial cancer and uterine sarcomas) in the United States for 2015 are:

- About 54,870 new cases of cancer of the uterine body
- About 10,170 deaths from cancers of the uterine body

These numbers include both endometrial cancers and uterine sarcomas. About 2% of uterine body cancers are sarcomas, so the actual numbers for endometrial cancer cases and deaths are slightly lower than the numbers above.

In this country, cancer of the endometrium is the most common cancer found in women's reproductive organs. The chance of a woman having this cancer during her lifetime is about 1 in 37.

What are the risk factors for endometrial cancer?

We do not yet know what causes most cases of endometrial cancer. But we do know that certain risk factors are linked to this disease. A risk factor is anything that changes a person's chance of getting a disease such as cancer. Different cancers have different risk factors. For example, being in strong sunlight without protection is a risk factor for skin cancer. Smoking is a risk factor for many cancers. Some risk factors, like your age or race, can't be changed. Others, like smoking and diet are under your control.

But risk factors don't tell us everything. Someone can have several risk factors and still not get a disease. Also, not having any risk factors doesn't mean that you won't get the disease. Even if a woman with endometrial cancer has one or more risk factors, there is no way to know which, if any, of these factors played a part in her cancer.

Risk factors for endometrial cancer

A woman's hormone balance plays a part in most endometrial cancers, but other factors can also affect a women’s risk of this disease. Factors that increase the risk of endometrial cancer include:

- Estrogen therapy (without progesterone) to treat the symptoms of the change of life (menopause)
- Having more menstrual cycles, either from starting to have menstrual periods at an earlier age or going through menopause at a later age
- Being overweight or obese
- Tamoxifen therapy
- Ovarian tumors that make estrogen
- Polycystic ovarian syndrome
- Getting older
- Diabetes
- Having a mother or sister with endometrial cancer
- A genetic syndrome called hereditary nonpolyposis colon cancer (also known as Lynch syndrome)
- A high fat diet

- Having previously been found to have ovarian or breast cancer
- Being treated with radiation therapy to the pelvis
- Endometrial hyperplasia, which is an overgrowth of cells lining the uterus, especially of it is called “atypical”

Some factors lower the risk of endometrial cancer, including:

- Birth control pills
- Using an IUD (intrauterine device)
- Physical activity and exercise

Can endometrial cancer be prevented?

Although many cases of endometrial cancer cannot be prevented, there are some things that may lower your risk of getting this disease.

Some things that all women can try to do are:

- Getting to and maintaining a healthy weight is one way to lower the risk of this cancer.
- Getting regular physical activity (exercise)
- Eating a healthy diet

Women who are taking hormones to treat the symptoms of menopause shouldn’t take estrogen alone (without progesterone) unless they don’t have a uterus.

For women with an endometrium problem (such as endometrial hyperplasia), having it treated before it becomes cancer is another way to lower the risk of endometrial cancer. Although some cases of hyperplasia will go away without treatment, some cases do need treatment. Following up with your doctor as scheduled can help make sure you get treatment if needed to prevent hyperplasia from becoming cancer.

Women with hereditary nonpolyposis colon cancer (HNPCC, Lynch syndrome) have a very high risk of endometrial cancer. A woman with HNPCC may choose to have her uterus removed (a hysterectomy) after she has finished having children to prevent endometrial cancer.

Finding endometrial cancer early

For women at average endometrial cancer risk

At this time, no screening tests or exams are recommended to find endometrial cancer early in women who are at average endometrial cancer risk and who have no symptoms.

Women should tell their doctors about any abnormal vaginal discharge or bleeding, such as bleeding after menopause. These need to be checked out because they could be caused by endometrial cancer.

For women who have a higher risk of endometrial cancer

Women at high risk for this cancer should also see their doctor whenever they have any vaginal bleeding or discharge that is not normal.

The American Cancer Society recommends that women who have (or may have based on their personal and family history) HNPCC be offered yearly testing with an endometrial biopsy beginning at age 35. Their doctors should discuss this test with them, including its risks, benefits, and limits.

This topic is discussed in more detail in our document *Endometrial Cancer*.

Signs and symptoms of endometrial cancer

The most common symptoms of endometrial cancer are:

- Abnormal vaginal bleeding, such as bleeding or spotting after menopause or (in someone who hasn’t gone through menopause) bleeding or spotting between periods
- Vaginal discharge
- Pain in the pelvis
- A lump in the pelvis
- Weight loss without trying

These symptoms can also be caused by problems other than cancer, but it is important to have them checked out by a doctor to find the cause.

How is endometrial cancer diagnosed?

Most women are diagnosed with endometrial cancer because they have symptoms. Watching for any signs and symptoms of this cancer (like abnormal vaginal bleeding or discharge) and telling your doctor about them right away allows the cancer to be found at an early stage. Finding it early improves the chances that it will be treated with success. But sometimes this cancer can reach an advanced stage before it causes any symptoms.

Seeing your doctor

If you have symptoms of endometrial cancer you should see your doctor. The doctor will ask about your symptoms, risk factors, and the health of your family members. The doctor will also do a physical and a pelvic exam.

If the doctor thinks you might have endometrial cancer, you should see a gynecologist -- a doctor with special training in finding and treating diseases of the female reproductive system. These doctors can help diagnose endometrial cancer and treat some early cases. You may also need to see a *gynecologic oncologist* -- a doctor with special training in treating cancers of the endometrium and other female reproductive organs. These doctors treat both early and advanced cases of endometrial cancer.

Ultrasound

If the doctor suspects endometrial cancer or another problem with the uterus, he or she will order an ultrasound of the uterus.

Ultrasound is the use of sound waves to take pictures of the inside of the body. For this test, gel is usually applied and a special wand that gives off sound waves is placed on the skin to look at the organs of the abdomen (belly) and pelvis. To get a better look at the uterus, the wand is often placed into the vagina. Salt water (saline) might be put into the uterus before the test to give a clearer picture.

An ultrasound can show whether the endometrium has become thicker than it should be. It may also help see if a cancer is growing into the muscle layer of the uterus.

Getting a sample of endometrial tissue

In order to know if the problem is really endometrial cancer, the doctor must remove some tissue so that it can be looked at under the microscope. Tissue can be taken out by doing an endometrial biopsy or by a D & C (dilation and curettage). These are described below.

Endometrial biopsy

This kind of biopsy can be done in a doctor's office. A very thin flexible tube is placed into the uterus through the cervix. Then suction is used to remove a small amount of endometrium. The suction usually takes less than a minute. This often causes discomfort much like menstrual cramps and can be helped by taking a drug like ibuprofen before the test. Sometimes numbing medicine is put into the cervix just before the test to help reduce the pain.

Hysteroscopy: This is a way that doctors can look inside the uterus. The doctor puts a tiny telescope into the uterus through the cervix. The uterus is then filled with salt water (saline). This lets the doctor see and take a sample of anything that might be causing a problem, such as a cancer or a polyp. You stay awake for this, and the biopsy is done after the area is numbed with medicine.

Dilation and curettage (D & C): If the biopsy sample doesn't get enough tissue, or if the doctor can't tell for sure whether it is cancer, a D & C must be done. This involves opening (dilating) the cervix and using a special instrument to scrape tissue from inside the uterus. This is done in the operating room under general anesthesia (you are asleep) or a spinal or epidural (medicine injected into the area around the spinal cord to make you numb from the waist down. Most women have little pain afterwards.

Testing the tissue

Tissue that has been taken out is looked at under a microscope to see whether there are cancer cells in it. If cancer is found, the cells will be studied to learn more about the cancer (the type and grade). The lab report will give these details.

If the doctor suspects that hereditary nonpolyposis colon cancer (HNPCC) is linked to your endometrial cancer, the tumor tissue can be tested for certain changes that can happen when one of the genes that causes HNPCC is faulty. Testing of tumor tissue is most often ordered in patients who are found to have endometrial cancer at an earlier than usual age or who have a family history of endometrial or colon cancer.

Imaging tests to look for cancer spread

Cystoscopy and proctoscopy: If a woman has signs that suggest the cancer may have spread, the doctor can use a lighted tube to look at the inside of the bladder (cystoscopy) or rectum (proctoscopy). Small pieces of tissue can be removed to be looked at under a microscope. These tests are rarely needed.

CT scan: This is a special type of x-ray (also called a CAT scan) that makes detailed pictures of the inside of the body. CT scans are rarely used to find endometrial cancer, but they may be helpful if there are signs the cancer has come back or spread to other

organs. CT scans can also be used to guide a biopsy needle into an area that could be cancer.

CT scans take longer than regular x-rays. You will need to lie still on a table while the scans are done. You may also have an IV (intravenous) line through which you get a contrast "dye." Some people are allergic to the dye and get hives or, rarely, problems like trouble breathing and low blood pressure. Be sure to tell the doctor if you have ever had a problem from any dye used for x-rays. You may also be asked to drink 1 to 2 pints of a liquid that helps outline the intestine so that it is not mistaken for tumors.

MRI scan (magnetic resonance imaging): MRI scans use radio waves and strong magnets instead of x-rays to take pictures. MRI scans are helpful in looking at the brain and spinal cord. They take longer than CT scans, and you may have to be placed inside a tube-like machine. This can be upsetting for some people. Special, “open” MRI machines can help with this if needed, but the drawback is that the images may not be as good. MRI machines make thumping or buzzing noises, so many places will give you headphones with music to help block it out. A contrast dye might be given into the vein, but it isn’t the same as the one used for CT scans.

PET scan (positron emission tomography): In this test, a type of radioactive sugar is used to look for cancer cells. The cancer cells take in large amounts of the sugar, which is put into your blood through an IV (intravenous) line. A special camera can then show where it goes in the body. PET is sometimes useful in finding small collections of cancer cells. PET is not often used when diagnosing endometrial cancer, but it may be done if the cancer has spread.

Chest x-ray: This can show if the cancer has spread to the lungs. It may also be used to look for serious lung or heart problems.

Blood tests

Complete blood count (CBC): This test measures the amount of red blood cells, white cells, and platelets in the blood. Many times women who have lost a lot of blood from the uterus will have low red blood cell counts. This is called anemia.

CA 125 blood test: CA 125 is a substance that many endometrial and ovarian cancers release into the bloodstream. This test doesn’t help find endometrial cancer, but it can be helpful in someone known to have this disease. Very high blood CA 125 levels can be a sign that the cancer has likely spread beyond the uterus. If CA 125 levels are high before surgery, doctors can track this number to find out how well the treatment is working. The levels will go down after surgery if all of the cancer cells have been removed. CA 125 levels may also be watched to see if the cancer has come back after treatment is done.

Staging of endometrial cancer

Staging is the process of finding out how widespread the cancer is and whether it has spread to other parts of the body. The stage of the cancer is an important factor in making treatment choices.

The 2 systems used for staging endometrial cancer are the *FIGO* (International Federation of Gynecology and Obstetrics) system and the American Joint Committee on Cancer TNM staging system. They are very much alike. They are both surgical staging systems, which means they are based on looking at the tissue removed during an operation. A doctor may order tests before surgery (like ultrasound, MRI, or CT scans) to look for signs that a cancer has spread. Although it is not as good as knowing the surgical stage, this information can be helpful in planning surgery and other treatments. If these tests show that the cancer may have spread outside the uterus, you may be referred to a gynecologic oncologist (if you are not already seeing one).

Stages are labeled using the number 0 and Roman numerals I through IV (1-4). Some of these stages are further divided (for example, IIIA, IIIB). As a rule, the lower the number, the less the cancer has spread. A higher number, such as stage IV (4), means a more advanced cancer.

After looking at your test results, the doctor will tell you the stage of your cancer. Be sure to ask your doctor to explain your stage in a way you understand. This will help you both decide on the best treatment for you.

Survival rates for endometrial cancer

Some people with cancer may want to know the survival rates for their type of cancer. Others may not find the numbers helpful, or may even not want to know them. If you decide that you don’t want to know them, stop reading here and skip to the next section.

The 5-year survival is the percentage of people who are still alive 5-years after diagnosis. Of course, many patients live longer than this, but it is a standard way to talk about the outlook of someone with cancer. It is important to understand that people with cancer can die of other things. The numbers below look at deaths from all causes and not just endometrial cancer.

These numbers can give you an overall picture, but keep in mind that every woman's situation is unique and the statistics can't predict exactly what will happen in your case. Factors other than stage can affect outlook. Talk with your cancer care team if you have questions about your personal chances of a cure, or how long you might survive your cancer. They know your situation best.

Stage of endometrial	**5-year observed**

adenocarcinoma	survival
Stage 0	90%
Stage IA	88%
Stage IB	75%
Stage II	69%
Stage IIIA	58%
Stage IIIB	50%
Stage IIIC	47%
Stage IVA	17%
Stage IVB	15%

How is endometrial cancer treated?

This information represents the views of the doctors and nurses serving on the American Cancer Society's Cancer Information Database Editorial Board. These views are based on their interpretation of studies published in medical journals, as well as their own professional experience.

The treatment information in this document is not official policy of the Society and is not intended as medical advice to replace the expertise and judgment of your cancer care team. It is intended to help you and your family make informed decisions, together with your doctor.

Your doctor may have reasons for suggesting a treatment plan different from these general treatment options. Don't hesitate to ask him or her questions about your treatment options.

About treatment

After going over your test results, your doctor will recommend one or more treatment options. Don't feel rushed about making a decision. If there is anything you do not understand, ask to have it explained again. The choice of treatment mostly depends on the type of cancer and stage of the disease when it was found. Other factors that could play a part might include your age, your overall health, whether you plan to have children, and other personal matters. Be sure you understand all the risks and side effects of the different treatments before making a decision.

You may want to get a second opinion. This can give you more information and help you feel more certain about the treatment plan you choose. Some insurance companies even

say you must get a second opinion before they will pay for some treatments, but most of the time a second opinion is not needed.

There are 4 basic types of treatment for women with endometrial cancer. Surgery is the main treatment for most women with endometrial cancer, but sometimes one or more of these treatments is combined.

- Surgery
- Radiation treatment
- Hormone treatment
- Chemotherapy (chemo)

Surgery for endometrial cancer

Hysterectomy

The main treatment for endometrial cancer is an operation to take out the uterus and cervix. This is called a *hysterectomy*. If only the uterus is removed, it is called a *simple* or *total hysterectomy*. If the tissue around the uterus (including the upper part of the vagina) is also removed, it is called a *radical hysterectomy*. This is used for more advanced cancers.

Standard (or “open”) hysterectomies are done two ways:

- In an *abdominal hysterectomy,* the uterus is removed through a cut (incision) in the belly
- In a *vaginal hysterectomy,* the uterus is removed through the vagina

A hysterectomy can also be done through the belly (abdomen) using laparoscopy. Laparoscopy is a technique that lets the surgeon look at the inside of the abdomen and pelvis through tubes put in through very small incisions. Small instruments can be controlled through the tubes. This allows the surgeon to operate without making a large cut into the abdomen. Surgery for endometrial cancer using laparoscopy seems to be just as good as standard operations if done by a surgeon who has a lot of experience in laparoscopic cancer surgery. Laparascopic surgery can also be done using a special robot such as the DaVinci® robot.

Bilateral salpingo-oophorectomy

Removing the ovaries and fallopian tubes (bilateral salpingo-oophorectomy) is not officially part of a hysterectomy but it is often done at the same time. For some younger women with very early stage endometrial cancer, leaving the ovaries in may be an option.

Lymph node surgery

To find out the stage of the cancer, lymph nodes in the pelvis and around the aorta will also need to be removed (see below). This can be done at the same time as an abdominal or laparoscopic hysterectomy or as a separate procedure.

If many of these lymph nodes are removed it is called a *lymph node dissection*. If only a few of the lymph nodes are removed, it is called *lymph node sampling*. Either way, the removed lymph nodes are looked at to see if they contain cancer cells.

Pelvic washings

To look for small numbers of cancer cells that are too small to see, the surgeon can "wash" the abdominal and pelvic areas with salt water (saline). The fluid is sent to the lab to see if it contains cancer cells.

Other methods to look for cancer spread

Omentectomy: The omentum is a layer of fatty tissue that covers the belly contents like an apron. When this tissue is removed, it is called an *omentectomy*. Sometimes the omentum is removed during a hysterectomy because it contains cancer or so it can be checked for cancer spread.

Peritoneal biopsies: The tissue lining the pelvis and abdomen is called the *peritoneum.* Peritoneal biopsies remove small pieces of this lining to check for cancer cells.

Tumor debulking

If cancer has spread throughout the abdomen, the surgeon may try to remove as much of the tumor as possible. This is called *debulking*. Debulking a cancer can help other treatments work better. Tumor debulking is helpful for other types of cancer, and it may also be helpful in treating women some women with endometrial cancer.

Recovery after surgery

For an abdominal hysterectomy, the hospital stay is usually 3 to 7 days. Complete recovery takes about 4 to 6 weeks. A laparoscopic procedure or vaginal hysterectomy usually requires a hospital stay of 1 to 2 days and 2 to 3 weeks for recovery. Problems are rare but could include a lot of bleeding, wound infection, and damage to the urine system or the intestines.

Side effects of surgery

A woman cannot become pregnant after a hysterectomy. For women who had not gone through menopause before surgery, taking out the ovaries will cause menopause. This can lead to symptoms like hot flashes, night sweats, and vaginal dryness. Taking out lymph nodes in the pelvis can lead to a buildup of fluid in the legs, a problem called *lymphedema*. This happens more often if radiation is given after surgery. Women who had a radical hysterectomy may need a catheter to drain the bladder for a time after surgery.

More detailed information about surgery for endometrial cancer can be found in our document *Endometrial Cancer*.

For more on lymphedema, see our document *Understanding Lymphedema – for Cancers Other than Breast Cancer*.

Surgery and menopausal symptoms can also affect your sex life. For more, you can read our booklet *Sexuality for the Woman With Cancer*.

Radiation therapy for endometrial cancer

Radiation therapy is treatment with high energy rays (such as x-rays) to kill cancer cells or shrink tumors. The radiation may come from outside the body (external radiation). Or it can come from radioactive materials placed near the tumor. (This is called *brachytherapy*.) In some cases, both types of radiation treatment are used.

How much of the pelvis needs to have radiation treatment depends on how far the cancer has spread.

Vaginal brachytherapy

With this method, radioactive pellets or seeds are put into a small tube that is placed in the vagina. This is most often used to treat the upper part of the vagina after surgery. One advantage with brachytherapy is that it does not affect other areas such as the bladder or rectum very much.

This treatment is given in the radiation suite of the hospital or care center, often starting about 4 to 6 weeks after surgery. How long the pellets stay in place depend on the form of brachytherapy you are getting.

- In one form, the pellets stay in place for days at a time, and the patient stays in the hospital (in bed) until they are removed. More than one treatment may be needed.
- In the other form, the pellets stay in place for less than an hour at a time. This treatment is often given weekly or even daily for at least 3 doses.

External radiation

This method of giving radiation is like a regular x-ray, but it takes longer. It is most often given 5 days a week for 4 to 6 weeks. Treatments usually take less than a half-hour, but the daily trips may be tiring.

Side effects of radiation treatment

Common short-term side effects include:

- Tiredness (fatigue)
- Upset stomach
- Loose bowels (diarrhea)
- Nausea and vomiting
- Skin changes like redness and soreness
- Bladder irritation, leading to problems passing urine
- Irritation of the vagina, leading to discomfort, drainage (a discharge), or even open sores
- Low blood counts

Radiation can also cause long-term side effects, including bowel and bladder problems and sexual side effects.

Pelvic radiation can also lead to a blockage of the fluid draining from the leg. This can cause severe swelling known as *lymphedema*. This is more common if pelvic lymph nodes were removed during the surgery to remove the cancer. For more on lymphedema, see our document *Understanding Lymphedema – for Cancers Other than Breast Cancer*.

If you are having side effects from radiation, talk to your doctor. There are often things you can do to get relief from these problems or prevent them from happening.

More detailed information about radiation therapy for endometrial cancer can be found in our document *Endometrial Cancer*.

Chemotherapy for endometrial cancer

Chemotherapy (chemo) is the use of cancer-fighting drugs to kill cancer cells. Usually these drugs are given into a vein or by mouth. Once the drugs enter the bloodstream they spread throughout the body. Chemo is useful in treating cancer that has spread. One or more chemo drugs may be used.

Side effects of chemo

While these drugs kill cancer cells, they can also damage some normal cells. This can cause side effects. Which side effects happen will depend on the type of drugs given, the amount or dose, how often treatment is done, and how long treatment lasts. Common side effects are:

- Nausea and vomiting
- Loss of appetite
- Hair loss
- Mouth sores
- A higher chance of infection (from low white blood cell counts)
- Bleeding or bruising after minor cuts or injuries (from a shortage of blood platelets)
- Shortness of breath or tiredness (from low red blood cell counts)

Most side effects go away after treatment ends. If you have problems with side effects, talk with your doctor or nurse, as there are often ways to help.

More detailed information about chemo for endometrial cancer can be found in our document *Endometrial Cancer*.

Hormone therapy for endometrial cancer

Hormone therapy is the use of hormones or hormone-blocking drugs to fight cancer. This type of hormone treatment is different from the hormones given to treat the symptoms of menopause.

Below are some of the types of hormone treatment that might be used to fight endometrial cancer.

Progestins: Progestins are progesterone-like drugs. These can be helpful in slowing the growth of some endometrial cancers. The drugs are usually taken as pills or given as shots (injections). Sometimes an intrauterine device (IUD) that contains a progestin can be used. Side effects can include high blood sugar levels in women with diabetes. Hot flashes, night sweats, and weight gain can also happen. Rarely, serious blood clots might form.

Tamoxifen: Tamoxifen is a drug more often used to treat breast cancer. It may also be used to treat advanced endometrial cancer or endometrial cancer that has come back after treatment. It can cause hot flashes and vaginal dryness. People taking tamoxifen also have an increased risk of serious blood clots in the leg.

GNRH (Gonadotropin-releasing hormone) agonists: These drugs can be given to women whose ovaries are still working to switch off the ovaries so they stop making estrogen. The drugs are given as shots (injected) every 1 to 3 months. Side effects can include any of the symptoms of menopause like hot flashes and vaginal dryness. If they are taken for a long time (years), these drugs can weaken bones.

Aromatase inhibitors: After the ovaries are removed (or if they are not working), estrogen is still made in fat tissue. This becomes the body's main source of estrogen. Drugs called aromatase inhibitors can stop this estrogen from being formed and lower estrogen levels even further. These drugs are still being studied for use in endometrial cancer treatment. Side effects can include joint and muscle pain as well as hot flashes. If they are taken for a long time (years), these drugs can weaken bones.

Clinical trials for endometrial cancer

You may have had to make a lot of decisions since you've been told you have cancer. One of the most important decisions you will make is deciding which treatment is best for you. You may have heard about clinical trials being done for your type of cancer. Or maybe someone on your health care team has mentioned a clinical trial to you.

Clinical trials are carefully controlled research studies that are done with patients who volunteer for them. They are done to get a closer look at promising new treatments or procedures.

If you would like to take part in a clinical trial, you should start by asking your doctor if your clinic or hospital conducts clinical trials. You can also call our clinical trials matching service for a list of clinical trials that meet your medical needs. You can reach this service at 1-800-303-5691 or on our website at www.cancer.org/clinicaltrials. You can also get a list of current clinical trials by calling the National Cancer Institute's Cancer Information Service toll-free at 1-800-4-CANCER (1-800-422-6237) or by visiting the NCI clinical trials website at www.cancer.gov/clinicaltrials.

There are requirements you must meet to take part in any clinical trial. If you do qualify for a clinical trial, it is up to you whether or not to enter (enroll in) it.

Clinical trials are one way to get state-of-the art cancer treatment. They are the only way for doctors to learn better methods to treat cancer. Still, they are not right for everyone.

You can get a lot more information on clinical trials, in our document called *Clinical Trials: What You Need to Know*. You can read it on our website or call our toll-free number and have it sent to you.

Complementary and alternative therapies for endometrial cancer

When you have cancer you are likely to hear about ways to treat your cancer or relieve symptoms that your doctor hasn't mentioned. Everyone from friends and family to Internet groups and websites may offer ideas for what might help you. These methods can include vitamins, herbs, and special diets, or other methods such as acupuncture or massage, to name a few.

What are complementary and alternative therapies?

It can be confusing because not everyone uses these terms the same way, and they are used to refer to many different methods. We use *complementary* to refer to treatments that are used *along with* your regular medical care. *Alternative* treatments are used *instead of* a doctor's medical treatment.

Complementary methods: Most complementary treatment methods are not offered as cures for cancer. Mainly, they are used to help you feel better. Some examples of methods that are used along with regular treatment are meditation to reduce stress, acupuncture to help relieve pain, or peppermint tea to relieve nausea. Some complementary methods are known to help, while others have not been tested. Some have been proven not to be helpful, and a few are even harmful.

Alternative treatments: Alternative treatments may be offered as cancer cures. These treatments have not been proven safe and effective in clinical trials. Some of these methods may be harmful, or have life-threatening side effects. But the biggest danger in most cases is that you may lose the chance to be helped by standard medical treatment. Delays or interruptions in your medical treatments may give the cancer more time to grow and make it less likely that treatment will help.

Finding out more

It is easy to see why people with cancer think about alternative methods. You want to do all you can to fight the cancer, and the idea of a treatment with few or no side effects sounds great. Sometimes medical treatments like chemotherapy can be hard to take, or they may no longer be working. But the truth is that most of these alternative methods have not been tested and proven to work in treating cancer.

As you think about your options, here are 3 important steps you can take:

- Look for "red flags" that suggest fraud. Does the method promise to cure all or most cancers? Are you told not to have regular medical treatments? Is the treatment a "secret" that requires you to visit certain providers or travel to another country?
- Talk to your doctor or nurse about any method you are thinking of using.

- Contact us at 1-800-227-2345 or see the “Complementary and Alternative Medicine” section of our website to learn more about complementary and alternative methods in general and to find out about the specific methods you are looking at.

The choice is yours

Decisions about how to treat or manage your cancer are always yours to make. If you want to use a non-standard treatment, learn all you can about the method and talk to your doctor about it. With good information and the support of your health care team, you may be able to safely use the methods that can help you while avoiding those that could be harmful.

What are some questions I can ask my doctor about endometrial cancer?

As you cope with cancer and cancer treatment, you need to have honest, open talks with your doctor. You should feel free to ask any question that's on your mind, no matter how small it might seem. Here are some questions you might want to ask. Be sure to add your own questions as you think of them. Nurses, social workers, and other members of the treatment team may also be able to answer many of your questions.

- Would you please write down the exact type of cancer I have?
- What is the grade of the cancer?
- Has the cancer spread beyond the uterus?
- What is the stage of the cancer and what does that mean in my case?
- What treatments choices do I have?
- What do you recommend? Why?
- Is there a clinical trial that might be right for me?
- What is the goal of this treatment?
- How will you follow my response to treatment?
- What risks or side effects should I expect?
- How will I feel during treatment?
- Will I be able to have children after my treatment?

- What are the chances of my cancer coming back with the treatment plans we have discussed?
- What should I do to be ready for treatment?
- Should I follow a special diet?
- What are my chances of survival, based on my cancer as you see it?
- Is estrogen replacement therapy still an option for me?
- When can I go back to my usual activities at work and around the house?

Add your own questions below:

Moving on after treatment for endometrial cancer

For many women with endometrial cancer, treatment may remove or destroy the cancer. It can feel good to be done with treatment, but it can also be stressful. You may find that you now worry about the cancer coming back. This is a very common concern among those who have had cancer. (When cancer comes back, it is called a *recurrence*.)

It may take a while before your recovery begins to feel real and your fears are somewhat relieved. You can learn more about what to look for and how to learn to live with the chance of cancer coming back in *Living With Uncertainty: The Fear of Cancer Recurrence*.

For other women, the cancer may never go away completely. They may get regular treatments with chemotherapy, radiation, hormones, or other treatments to try to help keep the cancer in check. Learning to live with cancer that does not go away can be difficult and very stressful. It has its own type of uncertainty. Our document *When Cancer Doesn't Go Away* talks more about this.

Follow-up care

When treatment ends, your doctors will still want to watch you closely. It is very important to go to all of your follow-up visits. During these, your doctors will ask questions about any problems you may have and may do exams and lab tests or x-rays and scans to look for signs of cancer or treatment side effects. Almost any cancer treatment can have side effects. Some may last for a few weeks to months, but others can

last the rest of your life. This is the time for you to talk to your cancer care team about any changes or problems you notice and any questions or concerns you have.

How often you need to be seen depends mostly on what stage your cancer was. Women with lower stage cancers can be seen less often, while those with higher stage cancers have visits that are closer together. Most of the time, when endometrial cancer comes back, it is within the first few years, so the time between visits tend to stretch out over time.

During each follow-up visit, the doctor will do a physical exam (including a pelvic exam). The doctor will also ask about any symptoms that might point to cancer recurrence or side effects of treatment. Most endometrial cancer recurrences are found based on symptoms, so it is very important that you tell your doctor exactly how you are feeling.

If your symptoms or the physical exam suggest the cancer may have come back, tests like CT scans or ultrasound studies, a CA 125 blood test, and/or biopsies may be done. Studies of many women with endometrial cancer show that if there are no symptoms or physical problems, routine blood tests and imaging tests are not needed.

It is also important to keep health insurance. While you hope your cancer won't come back, it could happen. If it does, you don't want to have to worry about paying for treatment. Should your cancer come back, our document *When Your Cancer Comes Back: Cancer Recurrence* can help you manage and cope with this phase of your treatment.

Seeing a new doctor

At some point after your cancer is found and treated, you may find yourself in the office of a new doctor. It is important that you be able to give your new doctor the exact details of your diagnosis and treatment. Make sure you have this information handy and always keep copies for yourself:

- A copy of your pathology reports from any biopsies or surgeries
- If you had surgery, a copy of your operative report
- If you were in the hospital, a copy of the discharge summary that the doctor wrote when you were sent home from the hospital
- If you had radiation treatment, copy of your treatment summary
- If you had chemotherapy or hormone therapy, a list of your drugs, drug doses, and when you took them

The doctor may want copies of this information for his records, but always keep copies for yourself.

Lifestyle changes after endometrial cancer

Having cancer and dealing with treatment can take a lot of time and energy, but it can also be a time to look at your life in new ways. Maybe you are thinking about how to improve your health over the long term.

Make healthier choices

For many people, a finding out they have cancer helps them focus on their health in ways they may not have thought much about in the past. Are there things you could do that might make you healthier? Maybe you could try to eat better or get more exercise. Maybe you could cut down on alcohol, or give up tobacco. Even things like keeping your stress level under control may help. Now is a good time to think about making changes that can have positive effects for the rest of your life. You will feel better, and you will also be healthier.

You can start by working on those things that worry you most. Get help with those that are harder for you. For instance, if you are thinking about quitting smoking and need help, call the American Cancer Society at 1-800-227-2345.

Eating better

Eating right can be hard for anyone, but it can get even tougher during and after cancer treatment. Treatment may change your sense of taste. Nausea can be a problem. You may not feel like eating and lose weight when you don't want to. Or you may have gained weight that you can't seem to lose. All of these things can be a challenge.

One of the best things you can do after cancer treatment is put healthy eating habits into place. You may be surprised at the long-term benefits of some simple changes, like increasing the variety of healthy foods you eat. Getting to and staying at a healthy weight, eating a healthy diet, and limiting your alcohol intake may lower your risk for a number of types of cancer, as well as having many other health benefits.

Rest, fatigue, and exercise

Feeling tired (fatigue) is a very common problem during and after cancer treatment. This is not a normal type of tiredness but a "bone-weary" exhaustion that doesn't get better with rest. For some people, fatigue lasts a long time after treatment and can keep them from staying active. But exercise can actually help reduce fatigue and the sense of depression that sometimes comes with feeling so tired.

If you are very tired, though, you will need to balance activity with rest. It is OK to rest when you need to. To learn more about fatigue, please see our documents *Fatigue in People With Cancer* and *Anemia in People With Cancer*.

If you were very ill or weren't able to do much during treatment, it is normal to lose some of your fitness, staying power, and muscle strength. Find an exercise plan that fits your own needs and talk with your health care team and get their input before starting. If you can, find an exercise buddy so that you're not doing it alone.

Exercise can improve your physical and emotional health.

- It improves your cardiovascular (heart and circulation) fitness.
- It makes your muscles stronger.
- It reduces fatigue.
- It can help lower anxiety and depression.
- It can make you feel generally happier.
- It can help you feel better about yourself.

Long term, we know that getting regular physical activity plays a role in helping to lower the risk of some cancers, as well as having other health benefits.

How about your emotional health after endometrial cancer?

Once your treatment ends, you may be surprised by the flood of emotions you go through. This happens to a lot of people. You may find that you think about the effect of your cancer on things like your family, friends, and career. Money may be a concern as the medical bills pile up. Or you may begin to think about the changes that cancer has brought to your relationship with your spouse or partner.

This is a good time to look for emotional and social support. You need people you can turn to. Support can come in many forms: family, friends, cancer support groups, church or spiritual groups, online support communities, or private counselors.

The cancer journey can feel very lonely. You don't need to go it alone. Your friends and family may feel shut out if you decide not include them. Let them in -- and let in anyone else who you feel may help. If you aren't sure who can help, call your American Cancer Society at 1-800-227-2345 and we can put you in touch with a group or resource that may work for you.

If treatment for endometrial cancer stops working

When a person has had many different treatments and the cancer has not been cured, over time the cancer tends to resist all treatment. At this time you may have to weigh the possible benefits of a new treatment against the downsides, like treatment side effects and clinic visits.

This is likely to be the hardest time in your battle with cancer -- when you have tried everything within reason and it's just not working anymore. Your doctor may offer you new treatment, but you will need to talk about whether the treatment is likely to improve your health or change your outlook for survival.

No matter what you decide to do, it is important for you to feel as good as possible. Make sure you are asking for and getting treatment for pain, nausea, or any other problems you may have. This type of treatment is called *palliative* treatment. It helps relieve symptoms but is not meant to cure the cancer.

At some point you may want to think about hospice care. Most of the time it is given at home. Your cancer may be causing symptoms or problems that need to be treated. Hospice focuses on your comfort. You should know that having hospice care doesn't mean you can't have treatment for the problems caused by your cancer or other health issues. It just means that the purpose of your care is to help you live life as fully as possible and to feel as well as you can. You can learn more about this in our document *Hospice Care*.

Staying hopeful is important, too. Your hope for a cure may not be as bright, but there is still hope for good times with family and friends -- times that are filled with joy and meaning. Pausing at this time in your cancer treatment gives you a chance to focus on the most important things in your life. Now is the time to do some things you've always wanted to do and to stop doing the things you no longer want to do. Though the cancer may be beyond your control, there are still choices you can make.

What's new in endometrial cancer research?

Changes in DNA

Recent research has taught us more about how certain changes can cause normal cells to become cancer. Defects (mutations) in DNA can change genes that control cell growth. If these genes are damaged, out-of-control growth may result in cancer.

Sometimes, endometrial cancer and colon cancer seem to “run in a family.” We now know that some of families have a higher risk for these cancers because family members have a defect in certain genes that normally help repair DNA damage. If these repair genes are not working right, damage to DNA is more likely to cause cancer to start. Tests for DNA changes may someday help find endometrial cancers early or predict how likely the cancer is to spread. This would help in choosing the best treatment for each woman. The long-range goal of this field of research is gene therapy that can correct the DNA defects that caused the cells to become cancer.

New treatments

Researchers are looking at new drugs, combinations of drugs, and targeted therapies to treat women with advanced endometrial cancer. Treatment with chemo after surgery (with or without radiation treatment) is also being studied.

Surgery

Another way to see if cancer has spread to the lymph nodes in the pelvis is to identify and remove the lymph nodes that are most likely draining the cancer. This is called *sentinel lymph node biopsy*. To do this, a radioactive substance and blue dye are put into the area with the cancer. The lymph nodes that turn blue (from the dye) or that become radioactive (from the tracer) are removed at surgery. These lymph nodes are looked at closely to see if they contain any cancer cells. This method is often used for some other tumors, such as breast cancer, but it is still new in the treatment of endometrial cancer. It is not yet known whether sentinel lymph node biopsy is as good as taking out the lymph nodes for staging and treatment of endometrial cancer, or read them on our website, www.cancer.org.

More information about endometrial cancer

From your American Cancer Society

The following information may also be helpful to you. These materials may be ordered from our toll-free number, 1-800-227-2345, or read them on our website, www.cancer.org.

Living with Cancer

Endometrial (Uterine) Cancer: Detailed Guide (also in Spanish)

After Diagnosis: A Guide for Patients and Families (also available in Spanish)

Distress in People With Cancer

Genetic Testing: What You Need to Know

Sexuality for the Woman With Cancer (also available in Spanish)

Guide to Controlling Cancer Pain (also available in Spanish)

When Cancer Doesn't Go Away

When Your Cancer Comes Back: Cancer Recurrence

Understanding cancer treatments

Understanding Cancer Surgery: A Guide for Patients and Families (also available in Spanish)

A Guide to Chemotherapy (also available in Spanish)

Understanding Radiation Therapy: A Guide for Patients and Families (also available in Spanish)

Cancer treatment side effects

Nausea and Vomiting

Anemia in People With Cancer

Fatigue in People With Cancer

Peripheral Neuropathy Caused by Chemotherapy

Family and caregiver concerns

Talking With Friends and Relatives About Your Cancer (also in Spanish)

What It Takes to Be a Caregiver

Caring for the Patient With Cancer at Home: A Guide for Patients and Families (also available in Spanish)

Helping Children When a Family Member Has Cancer: Dealing With Diagnosis (also available in Spanish)

Work, insurance, and finances

Health Insurance and Financial Assistance for the Cancer Patient

Returning to Work After Cancer Treatment

Working During Cancer Treatment

Your American Cancer Society also has books that you might find helpful. Call us at 1-800-227-2345 or visit our bookstore online at cancer.org/bookstore to find out about costs or to place an order.

National organizations and Web sites*

In addition to the American Cancer Society, other sources of patient information and support include:

Foundation for Women's Cancer (formerly the Gynecologic Cancer Foundation)
Toll-free number: 1-800-444-4441
Website: www.foundationforwomenscancer.org

> Offers referrals to gynecologic oncologists and has information about how to prevent, detect, and treat female cancer; also the booklet, “Renewing Intimacy and Sexuality After Gynecologic Cancer.” Educational materials are offered online, and educational programs for survivors are offered throughout the country.

National Cancer Institute
Telephone: 1-800-422-6237 (1-800-4-CANCER)
Website: www.cancer.gov

> Offers current information about breast cancer screening, diagnosis, and treatment as well as information on other types of cancer, as well as information for the family and children of people with cancer

**Inclusion on this list does not imply endorsement by the American Cancer Society.*

No matter who you are, we can help. Contact us anytime, day or night, for information and support. Call us at **1-800-227-2345** or visit www.cancer.org.

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