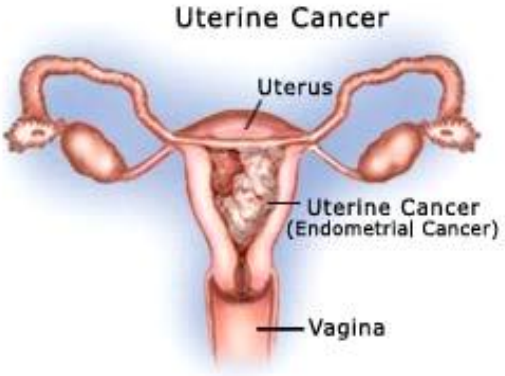
Faculty of Nursing

Woman health and Midwifery

Nursing Depart.

uterine tumor



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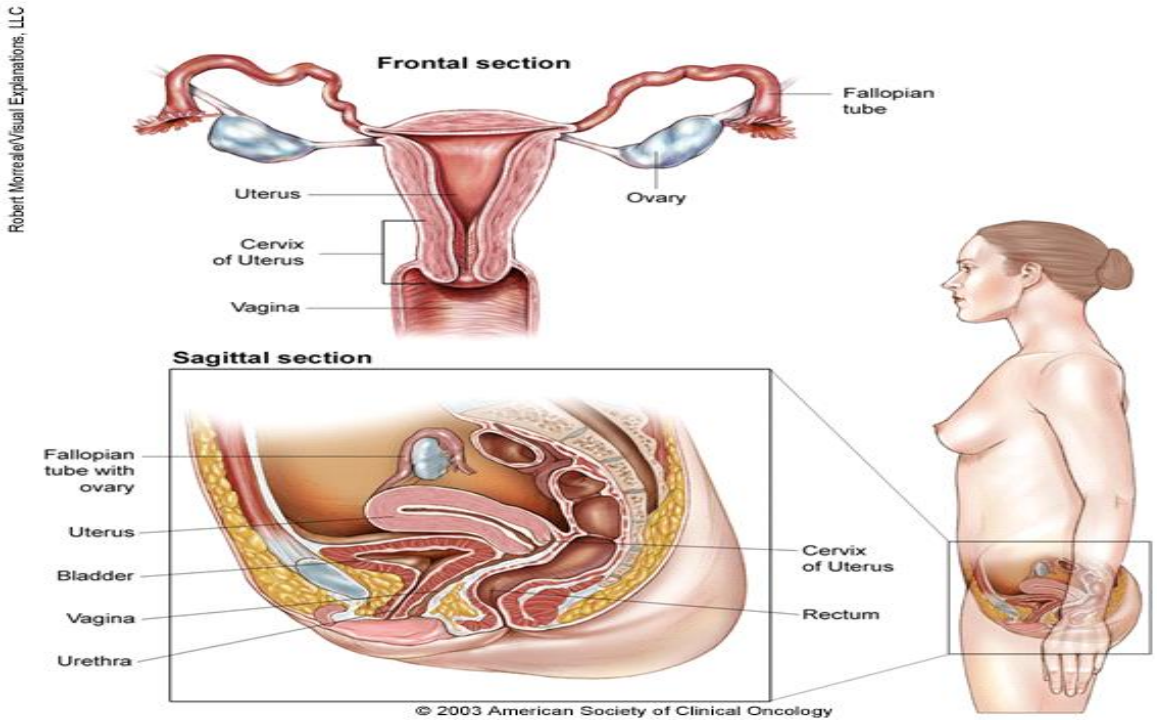
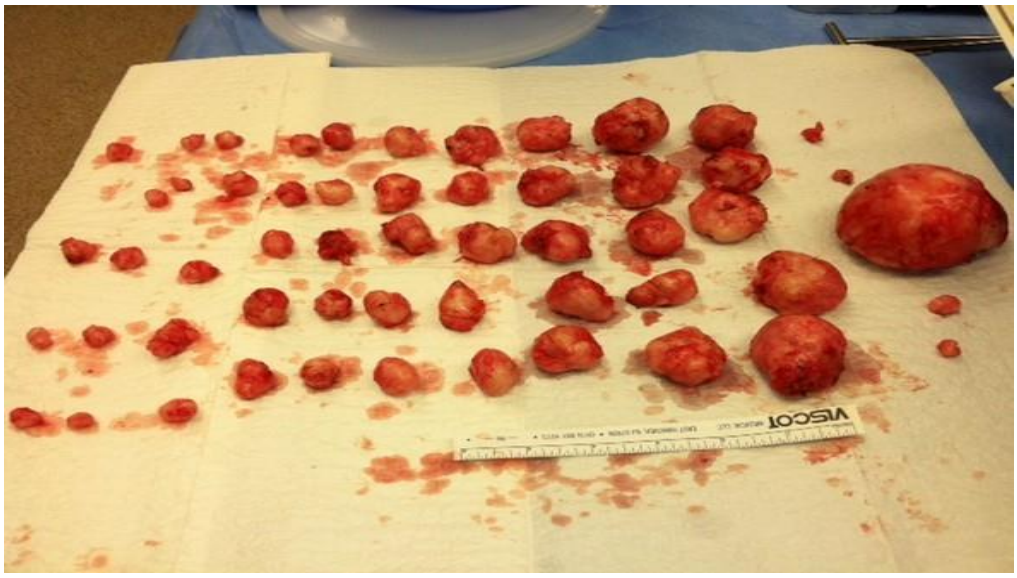
Introduction:

Uterine cancer is the most common cancer of a woman's reproductive system. Uterine cancer begins when normal cells in the uterus change and grows uncontrollably, forming a mass called a tumor. A tumor can be cancerous or benign. A cancerous tumor is malignant, meaning it can spread to other parts of the body. A benign tumor means the tumor will not spread. Noncancerous conditions of the uterus include fibroids, which are benign tumors in the muscle of the uterus. Another noncancerous condition is endometriosis, which describes the condition when endometrial tissue, typically lining the uterine cavity, is on the outside of the uterus or other organs. Endometrial hyperplasia, which is an increased number of cells in the uterine lining, can also happen and can be noncancerous



The size of the tumor



***There are two major types of uterine cancer*:**

1. Adenocarcinoma.

This makes up more than 80% of uterine cancers. It develops from cells in the lining of the uterus called the endometrium. This cancer is also commonly called endometrial cancer. A common type of endometrial adenocarcinoma is called endometriosis carcinoma, and treatment varies depending on the grade of the tumor, how far it goes into the uterus, and the stage or extent of disease (see Stages and Grades). A less common type is called endometrial serous carcinoma, and this form is treated in a fashion similar to ovarian cancer which is also commonly of the serous type.

2. Sarcoma

. This type of uterine cancer develops in the supporting tissues of the uterine glands or in the myometrium, which is the uterine muscle. Sarcoma accounts for about 2% to 4% of uterine cancers. Sarcomas are treated differently than adenocarcinomas in most situations. Types of endometrial cancers with some elements of sarcoma include leiomyosarcoma, endometrial stromal sarcoma or carcinosarcoma. Learn more about sarcoma

Risk factors and prevention

1. Age:

Uterine cancer most often occurs in women over 50

2. Obesity

Fatty tissue in women who are overweight produces additional estrogen, a sex hormone which can increase the risk of uterine cancer. This risk increases with an increase in body mass index (BMI; the ratio of a person's weight and height). About 40% of cases are linked to obesity.

3. Race

White women are more likely to develop uterine cancer than black women.

4. Genetics.

Uterine cancer may run in families where colon cancer is hereditary.

5. Other health conditions.

Women may have an increased risk of uterine cancer if they have had endometrial hyperplasia or if they have diabetes.

6. Other cancers.

Women who have had breast, colon, or ovarian cancer have an increased risk of uterine cancer.

7. **Tamoxifen**.

Women taking the drug tamoxifen (Nolvadex) to prevent or treat breast cancer have an increased risk of developing uterine cancer. However, the benefits of tamoxifen usually outweigh the risk of developing uterine cancer, but all women should discuss the benefits and risks of tamoxifen with their doctor.

8. Radiation therapy.

Women who have had previous radiation therapy for another cancer in the pelvic area, which is the lower part of the abdomen between the hip bones, have an increased risk of uterine cancer.

9. **Diet**.

Women who eat foods high in animal fat may have an increased risk of uterine cancer.

10. Estrogen.

Longer exposure to estrogen and/or an imbalance of estrogen is relevant to many of the following risk factors:

- Women who started having their periods before age 12 and/or go through menopause later in life
- Women who take hormone replacement therapy (HRT) after menopause, especially if they are only taking estrogen, which is also an important risk factor. The risk is lower for women taking estrogen with another sex hormone called progesterone.
- Women who have never been pregnant.

Prevention

Research has shown that certain factors can lower the risk of uterine cancer:

1. Taking birth control pills, especially over a long period of time
2. Considering the risk of uterine cancer before starting HRT, especially estrogen replacement therapy alone
3. Maintaining a healthy weight
4. If diabetic, maintaining good disease control such as regularly monitoring blood glucose levels

Signs and symptoms :

1. abnormal vaginal bleeding
2. Unusual vaginal bleeding, spotting, or discharge. For premenopausal women, menorrhagia, or abnormal uterine bleeding (AUB).
3. Difficulty or pain when urinating
4. Pain during sexual intercourse
5. Pain in the pelvic area

Diagnosis

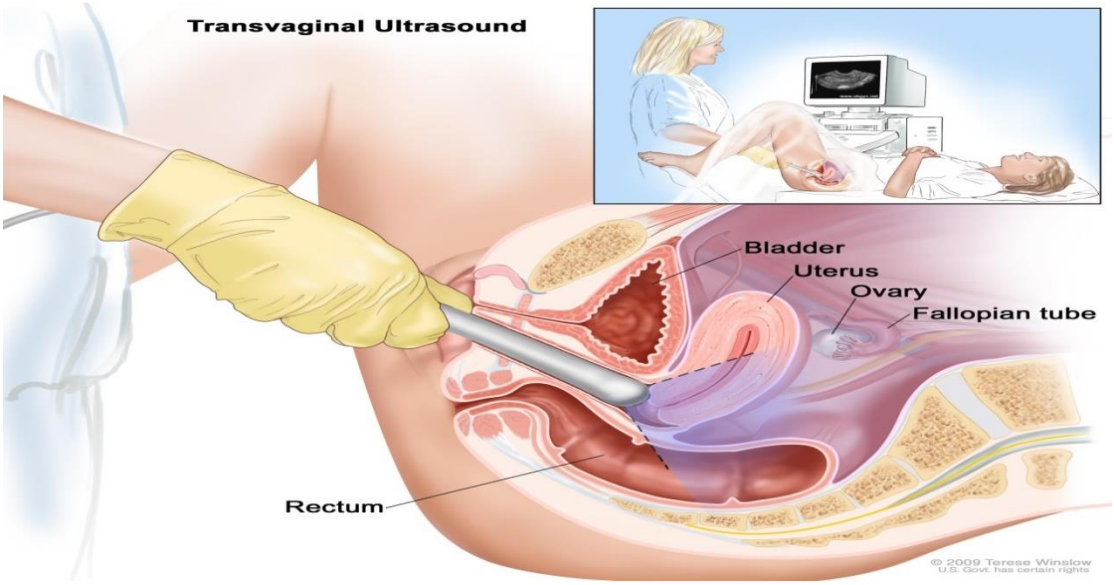
✓ Doctors use many tests to diagnose cancer and find out if it has spread to another part of the body, called metastasis. Some tests may also determine which treatments may be the most effective. For most types of cancer, a biopsy is the only way to make a definitive diagnosis of cancer. If a biopsy is not possible, the doctor may suggest other tests that will help make a diagnosis. Imaging tests may be used to find out whether the cancer has spread. This list describes options for diagnosing this type of cancer,

and not all tests listed will be used for every woman. Your doctor may consider these factors when choosing a diagnostic test:

- ❖ Age and medical condition
- ❖ Type of cancer suspected
- ❖ Signs and symptoms
- ❖ Previous test results

Pelvic examination. The doctor feels the uterus, vagina, ovaries, and rectum to check for any unusual findings. A Pap test, often done with a pelvic examination, is primarily done to evaluate for cervical cancer. However, sometimes a Pap test may occasionally find abnormal glandular cells, which are caused by uterine cancer:

Transvaginal ultrasound. An ultrasound uses sound waves to create a picture of internal organs. In a transvaginal ultrasound, an ultrasound wand is inserted into the vagina and aimed at the uterus to obtain the pictures. If the endometrium looks too thick, the doctor may decide to perform a biopsy



Computed tomography (CT or CAT) scan. A CT scan creates a three-dimensional picture of the inside of the body with an x-ray machine. A computer then combines these images into a detailed, cross-sectional view that shows any abnormalities or tumors. A CT scan can also be used to measure the tumor's size.

Magnetic resonance imaging (MRI). An MRI uses magnetic fields, not x-rays, to produce detailed images of the body. MRI can also be used to measure the tumor's size.

- ✓ Doctors also use the following surgical tests to establish a diagnosis:

Endometrial biopsy. A biopsy is the removal of a small amount of tissue for examination under a microscope. Other tests can suggest that cancer is present, but only a biopsy can make a definite diagnosis.

Dilatation and Curetage (D&C). A D&C is a procedure to remove tissue samples from the uterus. A woman is given anesthesia during the procedure. A D&C is often done in combination with a hysteroscopy so the doctor can view the lining of the uterus during the procedure

Stages and grades

There are different stage descriptions for different types of cancer:

Cancer stage grouping

Stage 0: The tumor is called carcinoma in situ, which means it is very early stage cancer. It is found only in one layer of cells and has not spread.

Stage I: The cancer is found only in the uterus or womb, and it has not spread to other parts of the body.

Stage IA: The cancer is found only in the endometrium or less than one-half of the myometrium.

Stage IB: The tumor has spread to one-half or more of the myometrium

Stage II: The tumor has spread from the uterus to the cervical stroma but not to other parts of the body.

Stage III: The cancer has spread beyond the uterus, but it is still only in the pelvic area.

Stage IIIA: The cancer has spread to the serosa of the uterus and/or the tissue of the fallopian tubes and ovaries but not to other parts of the body

Stage IIIB: The tumor has spread to the vagina or next to the uterus.

Stage IIIC1: The cancer has spread to the regional pelvic lymph nodes

Stage IIIC2: The cancer has spread to the para-aortic lymph nodes with or without spread to the regional pelvic lymph nodes

Stage IVA: The cancer has spread to the mucosa of the rectum or bladder.

Stage IVB: The cancer has spread to lymph nodes in the groin area, and/or it has spread to distant organs, such as the bones or lungs

Grade

Grade Doctors also describe this type of cancer by its grade (G), which describes how much cancer cells look like healthy cells when viewed under a microscope.

The letter "G" is used to define a grade for uterine cancer.

GX: The grade cannot be evaluated

G1: The cells are well differentiated

G2: The cells are moderately differentiated

G3: The cells are poorly differentiated

G4: The cells are undifferentiated

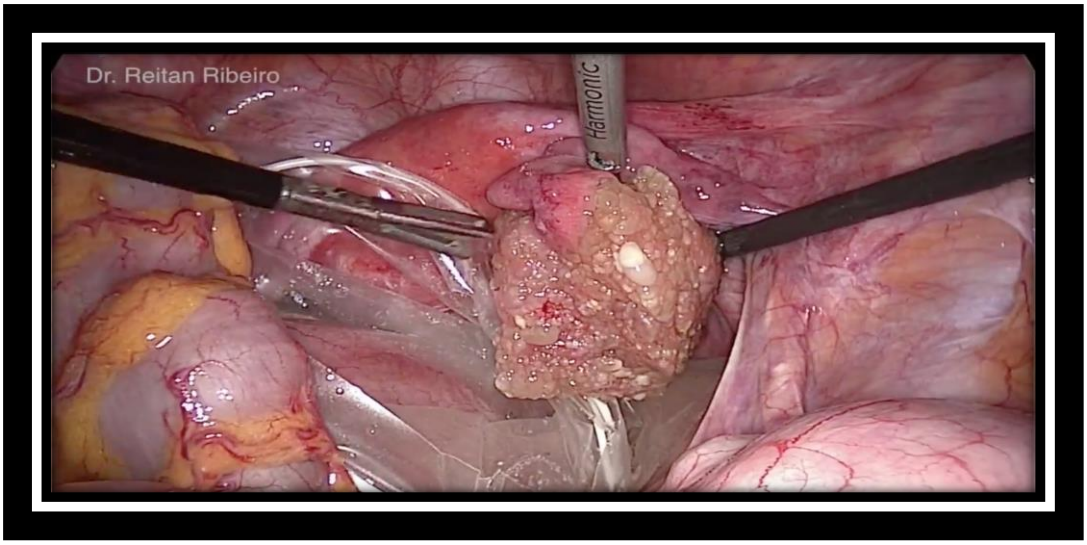
Recurrent uterine cancer

Recurrent cancer is cancer that has come back after treatment. Uterine cancer may come back in the uterus, pelvis, lymph nodes of the abdomen, or another part of the body. Approximately 70% of recurrent uterine cancer happens within three years of initial treatment. Some symptoms of recurrent cancer are similar to those experienced when the disease was first diagnosed.

Treatment

Surgery

Surgery is the removal of the tumor and surrounding tissue during an operation. It is typically the first treatment used for uterine cancer. A surgical oncologist is a doctor who specializes in treating cancer using surgery. Common surgical procedures for uterine cancer include:



Hysterectomy

Depending on the extent of the cancer, the surgeon will perform either a simple hysterectomy (removal of the uterus and cervix) or a radical hysterectomy (removal of the uterus, cervix, the upper part of the vagina, and nearby tissues). For patients who have been through menopause, the surgeon will also perform a bilateral salpingo-oophorectomy, which is the removal of both fallopian tubes and ovaries.

Lymph node dissection

At the same time as a hysterectomy, the surgeon may remove lymph nodes near the tumor to determine if the cancer has spread beyond the uterus.

Sentinel lymph node biopsy

Sometimes a sentinel lymph node biopsy is performed. A sentinel lymph node biopsy is a procedure that helps the doctor find out whether cancer has spread to the lymph nodes. This procedure is proven to be useful for breast

and other cancers, and doctors are researching its usefulness in uterine cancer.

Side effects of surgery

After surgery, the woman may remain in the hospital for several days. Woman who received laparoscopic or robotically assisted surgery often have a shorter hospital stay than women who received traditional surgery.

The most common short-term side effects include pain and extreme tiredness. If a woman is experiencing pain, her doctor will prescribe appropriate medicine.

Other immediate side effects may include nausea and vomiting, as well as difficulty emptying the bladder and having bowel movements. The woman's diet may be restricted to liquids, followed by a gradual return to solid foods.

After a hysterectomy, a woman can no longer become pregnant. If the ovaries are removed, this ends the body's production of sex hormones, resulting in premature menopause (if the woman has not already gone through menopause). While a hysterectomy substantially reduces the sex steroids that are produced by the body, the adrenal glands and fat tissues will provide some steroids as well. Soon after surgery, the woman is likely to experience menopausal symptoms, including hot flashes and vaginal dryness. Before the operation, women are encouraged to talk with their doctors about sexual and emotional side effects, reproductive health concerns, and

ways to address these issues before and after cancer treatment.

Radiation therapy

Radiation therapy is the use of high-energy x-rays or other particles to destroy cancer cells. A radiation therapy regimen (schedule) usually consists of a specific number of treatments given over a set period of time. The most common type of radiation treatment is called external-beam radiation therapy, which is radiation given from a machine outside the body.

Side effects from radiation therapy may include

fatigue, mild skin reactions, upset stomach, and loose bowel movements and will depend on the extent of radiation therapy given. Most side effects usually go away soon after treatment is finished but long term side effects causing bowel or vaginal symptoms are possible.

Sometimes, doctors advise their patients not to have sexual intercourse during radiation therapy. Women may resume normal sexual activity within a few weeks after treatment if they feel ready.

Chemotherapy

Chemotherapy is the use of drugs to destroy cancer cells, usually by stopping the cancer cells' ability to grow and divide.

The side effects of chemotherapy

Depend on the individual, the type of chemotherapy, and the dose used, but they can include fatigue, risk of infection, nausea and vomiting, hair loss, loss of appetite, and diarrhea.

Other potential side effects of chemotherapy for uterine cancer include the inability to become pregnant and early menopause, if the patient has not already had a hysterectomy. Rarely, some drugs cause some hearing loss.

Others may cause kidney damage. Patients may be given extra fluid intravenously for kidney protection.

Hormone therapy

Is used to slow the growth of certain types of uterine cancer cells that have receptors to the hormones on them..

Hormone therapy for uterine cancer often involves the sex hormone progesterone, given in a pill form.

Other hormone therapies include the aromatase inhibitors (AIs) often used for the treatment of women with breast cancer, such as anastrozole (Arimidex), letrozole (Femara), and exemestane (Aromasin).

An AI is a drug that reduces the amount of the hormone estrogen in a woman's body by stopping tissues and organs other than the ovaries from producing it.

Hormone therapy may also be used for women who cannot have surgery or radiation therapy or in combination with other types of treatment.

Side effects of hormone therapy in some patients include

Fluid retention, increase in appetite, insomnia, muscle aches and weight gain. Most side effects are manageable. Talk with your doctor about what you can expect.

Treatment options by stage

You may be recommended one or a combination of these treatment types depending a variety of factors, such as the tumor type, the tumor's stage, and other medical problems you may have.

Stage I

Surgery alone

Surgery with radiation therapy or chemotherapy

Hormone therapy with a progesterone-type drug. This is given orally or through an intra-uterine device that is used in special circumstances.

Surgery, radiation therapy, and chemotherapy

Stage II

Surgery with radiation therapy or chemotherapy

Surgery, radiation therapy, and chemotherapy

Stage III

Surgery with radiation therapy or chemotherapy

Surgery, radiation therapy, and chemotherapy

Stage IV

Surgery

Radiation therapy

Hormone therapy

Chemotherapy

It is important to ask your doctor about the various treatment options, including clinical trials that are available to you.

Metastatic uterine cancer

If cancer has spread to another location in the body, it is called metastatic cancer.

Fear of treatment side effects is common

After a diagnosis of cancer, but it may help to know that preventing and controlling side effects is a major focus of your health care team. This is called palliative or supportive care, and it is an important part of the overall treatment plan, regardless of the stage of disease.

Follow up

After treatment for uterine cancer ends, talk with your doctor about developing a follow-up care plan. This plan may include regular physical examinations and/or medical tests to monitor your recovery for the coming months and years.

In addition to a physical examination, follow-up care may include pelvic examinations, blood tests, yearly Pap tests, and x-rays. These tests may be done more frequently in the first and second year after treatment. Tell your doctor about any new symptoms, especially a loss of appetite, bladder or bowel changes, pain, vaginal bleeding, or weight changes. These symptoms may be signs that the cancer has come back or signs of another medical condition.

Women recovering from uterine cancer are encouraged to follow established guidelines for good health, such as maintaining a healthy weight, not smoking, eating a balanced diet, and having recommended cancer screens tests. Talk with your doctor to develop a plan that is best for your needs. Moderate physical activity can help rebuild your strength and energy level. Your doctor can help you create an appropriate exercise plan based upon your needs, physical abilities, and fitness level. Learn more about the next steps to take in survivorship, including making positive lifestyle changes.

What Can Be Expected in the Long Term?

Your prognosis will depend on the size and location of your fibroids. Fibroids may not need treatment if they are small or do not produce symptoms. If you are pregnant and have fibroids, or become pregnant and have fibroids, your physician will carefully monitor your condition. In most cases, fibroids do not cause problems during pregnancy. Speak with your doctor if you expect to become pregnant and have fibroids.