Gynecologic Oncology

Patient Handbook

Multidisciplinary Gynecologic Oncology Clinic

ROGEL CANCER CENTER
MICHIGAN MEDICINE

Gynecologic Oncology Handbook

Table of Contents

Your Health Care Team

Treatment Options

Enhanced Recovery After Surgery

Evaluation: Before, During and After Treatment

Next Steps

Welcome/Introduction

If you are reading this handbook, you or someone you love has been diagnosed with a gynecologic cancer. With that diagnosis, your life has already changed and the days ahead will bring more changes and challenges.

The doctors, nurses and other experienced health professionals at the University of Michigan Rogel Cancer Center created this handbook to help explain the different treatment options available to you, how to care for yourself during treatment and how and when to contact your health care team.

Your health care team is available to help answer questions about this material and to help you decide which treatment options are right for you and give you the best chances of controlling your cancer.

As you read through this handbook, you may feel overwhelmed. If so, you're not alone – most patients and family members feel that way as they are introduced to the new concepts, tools, techniques and resources involved in cancer treatment. Contact us as you make your treatment decisions. Important numbers are listed on page 6 of this handbook.

Important Phone Numbers

Offices:

Calls after hours are for emergency use. Calls for test results, scheduling questions, and prescription refills will only be addressed during clinic hours.

University of Michigan — Clinic Hours: 8:00am — 5:00pm	(734) 647-8906
St. Joseph Mercy Hospitals — Clinic Hours: 8:00am — 4:00pm	(734) 712-2005
MidMichigan Hospital — Clinic Hours: 8:00am — 4:00pm	(989) 837-9047

University of Michigan Support Services:

Billing	(855) 855-0863
Fertility Counseling Program Center for Reproductive Health	(734) 763- 4323
Gyn/Onc Fax - University of Michigan	(734) 936-9269
Home Med	(800) 862-2731
Infusion Appointments (Use only for same day appointments, if you will be late or need to cancel.)	(734) 647-8908
Medical Records	(734) 936-5490
Nutrition Clinic Appointments	(877) 907-0859
Patient Financial Counseling	(734) 232-2621 or (877) 326-9155
Patient Customer Service	(734) 615-0863 or (855) 855-0863
Patient Education Program	(734) 647-8626
Patient Assistance Center	(877) 907-0859
Radiation Oncology Department	(734) 936-4320
Social Work	(734) 647-8901
Symptom Management Program	(877) 907-0859
University of Michigan Home Care Retail Store	(734) 647-3364

When to Call Your Doctor or Nurse

Everyone is different and may have slightly different complications following treatment. In order to help you, we need you to be aware of what is **abnormal or unusual** for you. Be alert for anything that is different, and report it to your health care team.

Call your doctor or nurse if:

- You are feeling confused, dizzy, overly tired or weak.
- You notice yellowing of your eyes or skin.
- You have redness, pain or sores in your mouth causing pain with chewing or swallowing.
- Your heartbeat feels unusual or irregular.
- You have not been able to eat or drink in the past 24 hours.
- You have been nauseated or vomiting for more than 24 hours.
- You have not had a bowel movement for 2-3 days.
- You have diarrhea (loose, watery stool) for more than 24 hours.
- You have blood in your urine or in your stools (either bright red or black bowel movements). Please note that iron supplements may turn your stools very dark in color.
- You have any vaginal bleeding or discharge that is unusual for you.
- You have a nose bleed that does not stop after 20 minutes.
- You have pain that is not controlled by your current medication.
- You notice any changes in your intravenous (IV) catheter or surgical drains (if any), including a change in the appearance of the line, redness, drainage, swelling or pain.
- You have an oral temperature of 100.5 degrees Fahrenheit (38.1 degrees C) or higher. **Do Not** take Tylenol or aspirin until you speak with your doctor or nurse.

- You have signs and symptoms of an infection. These include shaking and/or chills, a burning feeling when urinating, a cough, a sore throat, a general feeling of tiredness or “flu-like” symptoms, or redness or swelling at the incision sight.

Call (734) 647-8906 to speak with your nurse if you have any other concerns or questions not listed.

Our goal in the Gynecologic Oncology (Gyn/Onc) program is to provide you with the best possible care while you are undergoing treatment for your cancer. We’d like to introduce you to your health care team. This allows you to know who will be caring for you while you are being treated at the University of Michigan Rogel Cancer Center. In the back pocket of this handbook you’ll find a list of Gyn/Onc faculty and staff.

Your Health Care Team

Doctors

While undergoing cancer treatment here at the University of Michigan Rogel Cancer Center, your care will be provided by a team of health professionals trained in gynecologic oncology. Gynecologic oncologists are specialty trained doctors who are experts in cancer surgery, chemotherapy, and radiation implants. Medical oncologists are specialty trained doctors who are experts in chemotherapy. Gynecologists are specialists with expertise in pre-cancers.

The University of Michigan Rogel Cancer Center is a teaching hospital, which means we provide for the education of students in health care related fields. Fellows and residents are doctors who are completing specialty training. Medical students are not yet doctors, but soon will be. They are part of the team and will participate in your care under the guidance and supervision of your faculty ("attending") doctor.

Physician Assistants

A Physician Assistant, also known as a PA, is a licensed provider. PAs assist with patient evaluations on behalf of the attending doctors and may diagnose and treat patients under the supervision of the attending doctor. Once your treatment has been completed, a PA will often be your provider for many of your surveillance exams in our Cancer Survivor's Clinic. These careful follow-up exams allow us to monitor for any hint of relapse of the cancer.

Nursing

Nurses are part of your patient care team. They are available to talk about treatment and its side effects and can help answer any questions you may have.

Please bear in mind that the nurse may not know the specifics of your therapy; so, treatment issues may be referred back for discussion with your doctor. A home care coordinator, who is also a nurse, is often involved in helping you and your family set up home care, including nursing visits, home equipment and other needs.

Clinical Pharmacologist

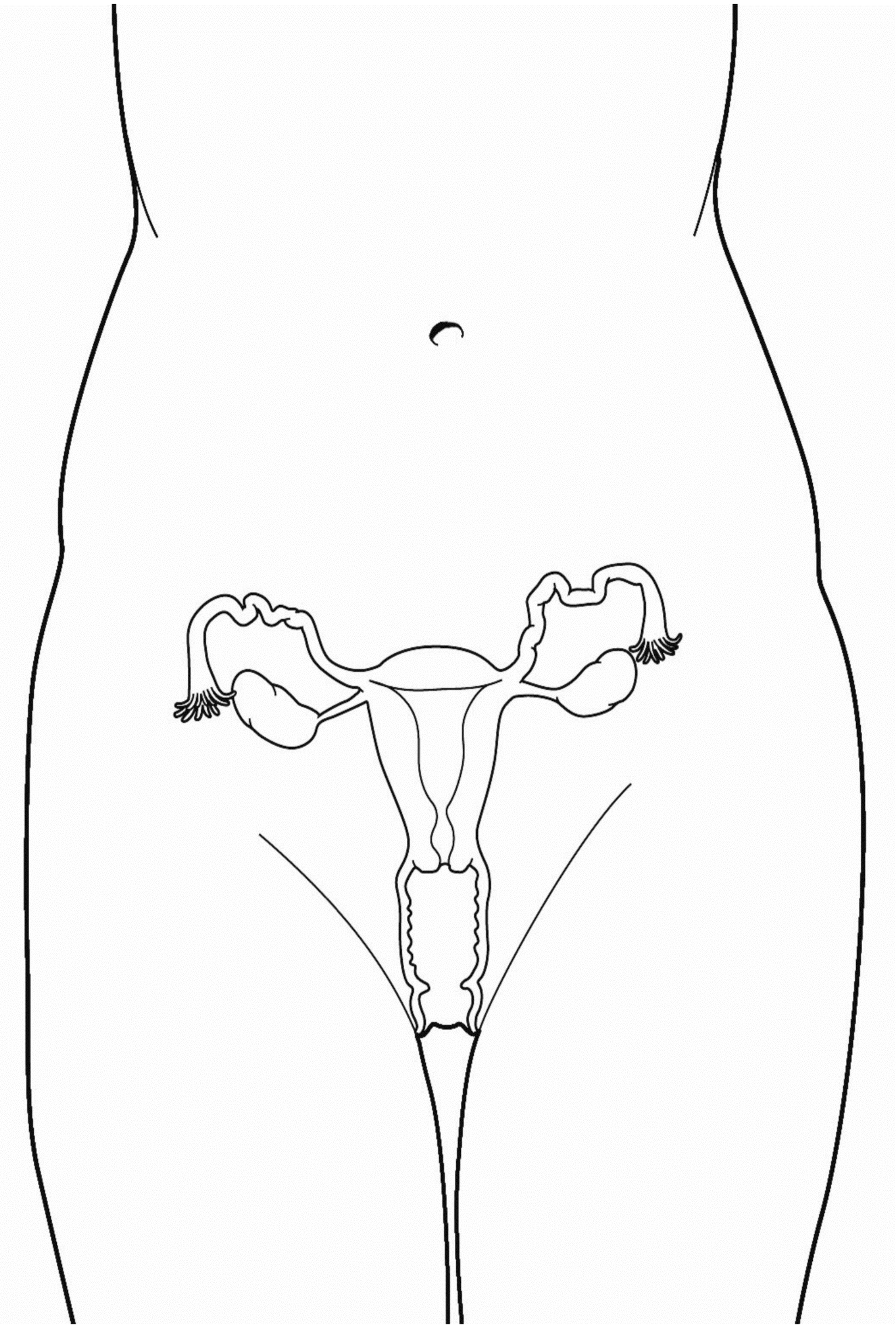
A clinical pharmacologist may monitor the medications (oral and IV) you are given and provide you with education on how to take your medication correctly.

Social Worker

A social worker is a licensed professional available to you and your family to discuss your needs and concerns. They can assist you with finding housing, financial or insurance concerns, referrals to community agencies as well as assistance in dealing with the emotional aspects of going through treatment. Call (734) 647-8901 for an appointment.

Registered Dietitian

A registered dietitian can help you with your nutritional concerns. They will meet with you one-on-one to provide suggestions for maintaining the best nutritional health while you are being treated for cancer. These complimentary services are offered to cancer center patients. To set up an appointment, call (877) 907-0859. An inpatient registered dietitian is also available when you are in the hospital.



Notes:

What is Chemotherapy?

Chemotherapy (chemo) is a type of treatment that includes a drug or a combination of drugs to treat cancer. Sometimes these medications are called "anti-cancer" drugs. Chemotherapy treatments may be given in many ways:

- **Intravenous (IV)** — Through a catheter tube in the vein, normally placed in the arm. Sometimes, your doctor may recommend having an IV infusion device. The two most common are peripherally inserted central catheter (PICC) lines and ports. Both of these devices stay in longer than an IV catheter placed in your vein at the time of your infusion visit. Talk to your health care team for more information about what's best for you.
- **Orally** — Taken by mouth as pills, capsules or liquids that you swallow.
- **Intracavitary** — Given directly into a body area, usually the abdomen.

The type of chemotherapy you receive will depend on the type of cancer you have as well as the extent of spread (if any) of cancer. Chemotherapy can be used alone or in combination with other types of treatment, such as surgery or radiation.

If chemotherapy is needed, you will receive additional information. Chemotherapy uses drugs to kill cancer cells. When a chemotherapy drug kills cancer cells, it will also kill a smaller number of normal cells within the body. This may result in side effects or toxicity from chemotherapy drugs.

Chemotherapy affects other organs of the body such as the kidneys, heart, etc. Although severe side effects are uncommon, it is impossible to predict who will experience these side effects and who will not.

- You will be given information about the kind of chemotherapy drugs that you will be taking and what side effects might be expected.
- Talk to your doctor or nurse if you experience any side effects.

What is Radiation Therapy?

Radiation Therapy uses X-rays as a local treatment. Radiation therapy may be used alone, or in combination with other types of treatments. If you need radiation therapy, you will receive additional information on how to care for yourself during treatment, too.

You may feel tired during radiation treatment. Treatment may last six weeks or more and the specifics of this treatment will vary according to what type of cancer treatment you require.

A common side effect of radiation during treatment is diarrhea. Making changes to your diet can help with diarrhea and there are medications that can help to minimize this problem.

Hair loss will occur only in the part of the body exposed to radiation treatments (typically the pubic hair region), unlike the more widespread hair loss associated with some kinds of chemotherapy.

What if I need surgery?

If surgery is needed, you will need time to heal. It takes about two weeks for laparoscopy incisions to heal and six weeks for open types of surgery incisions to heal. In general, you can return to light activities and chores once you are discharged from the hospital. Light activities can speed recovery.

Climbing stairs is okay, if taken slowly. It is alright to ride in a car. Do not drive unless you have been cleared by your doctor. Do not drive if you are taking narcotic pain medication. Driving is usually safe within two to four weeks after surgery.

Do not lift heavy objects weighing more than five to ten pounds (a gallon of milk weighs 8.6 pounds) for the first six weeks after surgery.

Do not resume having sexual intercourse until you are completely healed. This varies from person to person, but generally healing is complete in six to ten weeks. Talk with your doctor before resuming normal sexual activity. You may be given additional recommendations based on your specific type of surgery.

Feel free to ask as many questions as you need to. Our goal is to help you understand how to care for yourself after treatment.

Preparing for Your Surgery

At your pre-operative visit

- Meet your gynecology/oncology doctor and care team.
- Sign surgical consent form, and ask any questions you may have about surgery.
- Review all instructions with your nurse.

Getting ready

- Review your medications and follow the instructions you were given at your clinic visit.
- If you take blood thinners, follow the instructions given to you (if you were told to stop them, please clarify the date of last dose).
- Complete any blood work or pre-surgery testing if ordered by your gynecology/oncology doctor.
- Continue to eat a regular diet and stay well hydrated. Avoid big meals with meat a few days prior to the surgery.
- Try to walk and be as active as you are able every day before your surgery.
- Make a plan for your recovery at home after surgery and identify who will support you if needed. You may need assistance with:
  - **Personal care** such as incision care or bathing.
  - **Transportation** to and from the hospital.
  - **Chores** like cooking, shopping, laundry.
  - **Caring** for others including children and pets.

The Day Before Surgery

Preparing at home:

- If you are instructed to do a bowel prep, do as instructed. Try to finish the bowel prep, but if you are unable to do so, your surgery will still proceed as planned.

- If you were given oral antibiotics, take these as instructed. You may need nausea medications if oral antibiotics make you nauseated.
- If you have not been given a bowel prep, you may continue regular food until midnight, then clear liquids only.
- Take a shower with the chlorhexidine soap that was prescribed, making sure to thoroughly wash your abdomen and skin folds.
- Review instructions for the day of surgery, including what time and where to check in.
- Try to rest the night before surgery.

The Day of Surgery

Before you leave home

- Take a shower with the chlorhexidine soap that was prescribed.
- You may drink only clear liquids up to 2 hours prior to your scheduled surgery. However, please do not drink any liquids once you arrive.
- Bring this paperwork with you to the hospital.

At the hospital

At your assigned arrival time, check in at the Surgery Family Waiting Room.

- In the pre-operative area, the surgery and anesthesia teams will review the procedure with you and answer any questions.
- The pre-op nurse will assist you to use antibacterial skin wipes to prevent infection.

After your surgery

You will wake up in the recovery area and then be taken to your hospital room.

- A nurse will help you get out of bed. You may walk once you are alert and awake. Physical activity helps shorten your recovery time by keeping muscles active, helping the return of bowel function, and preventing complications like blood clots and pneumonia.

- The urinary catheter may be removed 6 hours after your surgery. Some surgeries require it to stay in longer.
- Start with a liquid diet and advance to a regular diet once you feel hungry. Begin with small amounts. You should not eat if you feel nauseated.
- You will be given some recommendations for a bland diet that is easier on your system. (See page 23.)
- You will have a combination of IV and oral pain medications available to help keep you comfortable.

During your hospital stay

- The surgery team will come by your bedside typically twice a day to check on you and answer any questions you may have.
- Continue to drink liquids by mouth.
- Your IV fluids will be turned off once you are able to drink enough fluids by mouth.
- If you are feeling hungry, you may choose from a general diet, **but you should start with small amounts and try bland foods first**. (See page 23.)
- Perform breathing exercises 10 times an hour when you are awake.
- Sit in a chair for your meals.
- Try to walk at least 4 times daily and spend most of your day up out of bed.
- Most patients have some pain or discomfort after surgery. Our goal is to manage your pain so that you can be active and participate in your recovery.
- Once you are tolerating food, you will be switched to all oral pain medications.
- If you are unable to urinate after your catheter is removed, we will help you empty your bladder with a small catheter until you are able to urinate on your own.
- Wear the leg squeezers on your lower legs to prevent blood clots.

- In most cases, you may shower on day 2.
- The care management team will assess your discharge needs and help to arrange support for you at home if needed.

Steps to Discharge

- Tolerate regular food without nausea.
- Pain controlled with oral medications.
- Be able to walk and get out of bed.
- Have a safe discharge plan in place.
- Be without any complications.
- If you are discharged with blood thinner injections (Lovenox), your nurse will teach you how to give yourself injections before you go home.
- If you had laparoscopic surgery, the goal is to go home either on day of surgery or the next day. Some open surgery patients are ready to go home as early as day 2 or 3. You will be ready for discharge when meeting all of your milestones.
- Pick up medicines from the hospital pharmacy.

Daily Progress

Day 1

Walks ____ ____ ____ ____ ____

Breathing Exercises ____ ____ ____ ____ ____ ____ ____ ____ ____ ____

Day 2

Walks ____ ____ ____ ____ ____

Breathing Exercises ____ ____ ____ ____ ____ ____ ____ ____ ____ ____

Day 3

Walks ____ ____ ____ ____ ____

Breathing Exercises ____ ____ ____ ____ ____ ____ ____ ____ ____ ____

Day 4

Walks ____ ____ ____ ____ ____

Breathing Exercises ____ ____ ____ ____ ____ ____ ____ ____ ____ ____

Day 5

Walks ____ ____ ____ ____ ____

Breathing Exercises ____ ____ ____ ____ ____ ____ ____ ____ ____ ____

Continued recovery at home

- You may need assistance from family or friends for the first few days at home.
- Your appetite may be slow at first, but continue to eat a regular diet as tolerated.
- Drink plenty of fluids to stay hydrated.
- Continue to take pain medications as needed. If you are taking narcotics, you may experience side effects such as sleepiness, nausea, dizziness, and constipation. You may need to take a stool softener if you are taking pain medications. Minimize use of narcotics because they are addictive.
- Continue to walk and be as active as tolerated, but avoid strenuous activity.

Other goals

Questions for your surgeon

Enhanced Recovery Diet Helpful Hints

Nutrition is an important part of recovering from surgery.

The effects of surgery and anesthesia may cause you to experience some nausea or a decreased appetite in the first few days of your recovery.

You may pick and choose from the adult general diet, but we recommend that you start slow and choose foods that are bland and easy-to-digest.

You should only eat if you are feeling hungry. If you experience nausea or vomiting, you should discuss this with your care team.

Below is a list of tips to help guide you:

- Avoid spicy, greasy or fried foods.
- Avoid carbonated beverages, or let them go flat prior to drinking.
- Avoid high-fiber foods that may be harder to digest, like raw vegetables or salad greens.
- Avoid foods that may cause indigestion, like tomato sauces and chili, or dairy products for some patients.

Examples of bland food choices include:

- Oatmeal
- Applesauce
- Toast or English muffin
- Bagel
- Cream of wheat
- Crackers
- Cereal
- Yogurt
- Scrambled eggs
- Milk shake
- Soups or broths
- Pudding
- Popsicles
- Jello
- Plain pasta
- Rice
- Baked potatoes
- Cooked vegetables
- Chicken breast

You may order whatever sounds appealing to you, and then slowly advance your diet to what you would normally eat. Continue to drink plenty of fluids. If you have any questions or concerns about your diet, please discuss it with your care team.

Evaluation: Before, During and After Treatment

Before, during and after treatment, you may undergo many tests. The tests you receive will depend on your disease, your treatment plan and/or your past history. Some tests may be repeated during the treatment process. This is to monitor for changes that may occur. Some of the tests are:

Biopsy

Removes a small piece of tissue or skin to see if cancer or precancer is present.

Blood Tests

Blood tests such as CBC, liver and kidney tell how well you will be able to tolerate cancer treatment such as surgery or chemotherapy.

CAT or CT Scan (Computed Axial Tomography)

An imaging study where multiple X-Rays (cross-sectional images) are taken of a part of the body to produce pictures of internal organs. Injection of a dye is needed in most scans.

Colposcopy

Use of a binocular microscope to evaluate the cervix in women with pre-cancer of the cervix.

ECHO/EKG/MUGA (Echo – Echocardiography; EKG – Electrocardiogram; MUGA – Multigated Acquisition)

These are different tests that determine how your heart is functioning and one or all may be necessary prior to surgery or chemotherapy.

Pap Test

A gentle scraping of the cervix or vagina to see if cancer or precancer (dysplasia) may be present.

PET Scan (Positron Emission Tomography)

An imaging study in which a special sugar tagged with short acting radiation is injected into the body. The sugar is consumed as fuel more readily by cancer cells, and this shows up as a “hot spot” on the images, allowing the location of cancer cells to be determined.

Tumor Marker Blood Tests

A tumor marker is an indicator for the presence of cancer. The marker is a substance made by a cancer cell that can be measured in the blood and may go down in response to treatment.

Ultrasound

An imaging study that uses sound waves to construct an image of internal organs.

Urinalysis and Urine Cultures

Checks for the presence of a urinary tract infection and assesses your kidney function.

Outpatient Information

At the University of Michigan, the Gynecology/Oncology clinic is located on Floor 1 of the Rogel Cancer Center.

If you require outpatient chemotherapy, you will most likely be treated in the Infusion Center, located on Floor B1 of the cancer center. Some outpatient chemotherapy may be given at other sites in the cancer center and medical center, including the Med Inn, or off-site. Your chemotherapy nurse will make sure you know your treatment location.

Depending on your treatment, you may need to stay in the Ann Arbor area for an extended period of time. Please talk to a nurse or social worker regarding your lodging needs.

Inpatient Information – Gynecologic Oncology Unit

If you need hospitalization for surgery or some types of chemotherapy, you will most likely be on the Gynecologic Oncology Unit.

Visiting hours and visitors

Visiting hours are unrestricted. There are minimal limitations on the number of visitors allowed in a private room. If you are in a semi-private room, you are asked to limit visitors to two at one time. Any visitors who have colds, flu or other illnesses are asked to check-in at the nurse's station on the unit and probably shouldn't visit until they are healthy. Young children may visit if they have not been recently exposed to contagious diseases (such as chickenpox, measles, colds or flu) and are healthy.

Frequently Asked Questions

Q: Will my hair fall out from chemotherapy and if so, when does that occur?
A: The degree of hair loss (alopecia) varies from person to person and also depends on which chemotherapy drugs are prescribed. Hair loss caused by chemotherapy may become apparent over two to three weeks. After stopping chemotherapy, initial regrowth may be seen in four to six weeks. If you are treated with radiation therapy, you will probably lose pubic hair, but you will not lose the hair on your head. Hair loss caused by radiation is usually permanent.

Q: If my blood counts drop from chemotherapy, what will be done?
A: Depending on your symptoms, you may receive medications to increase your white cells. Other medications such as antibiotics may also be prescribed. Occasionally, a blood transfusion may be necessary. If blood counts are very low, future chemotherapy doses may need to be reduced or delayed.

Q: Will I be able to maintain the same level of activity? Can I go to work or run errands?
A: Response to chemotherapy, surgery, or radiation varies from person to person. It is normal to feel tired for the first few weeks after surgery. You may also be fatigued while undergoing chemotherapy or radiation treatments. Pay attention to the clues your body gives you and rest as needed. It is a good idea to discuss fatigue with your doctor or nurse. Fatigue can be related to many things, such as low blood counts, normal everyday activity, etc. Your doctor or nurse can help you sort out the cause of your fatigue and how to treat it.

Q: Should my diet be any different before chemotherapy?
A: Some people find that it may be helpful to eat foods that are more easily tolerated, such as bland foods, soups and tea, while avoiding spicy or fatty foods. (See page 23.)

Q: Can I drive?
A: It is not a good idea to drive if you are taking narcotic pain medications or medications for nausea. These medications can impair your ability to react quickly in driving situations. Ask your doctor when you can begin driving again.

Q: Can I work during chemotherapy or radiation therapy?
A: Depending on the type of job and activities involved, you may be able to work at your regular job. Your employer may be able to make some modifications to your regular job so that you can work during treatment.

Q: What does it mean to be treated in a research hospital (University Hospital)?
A. Research hospitals provide care for rare and complex conditions, teach future health care providers, and move research results into practice.

Although we have made great strides in the treatment of cancer, some types of cancer are not yet curable. Our goal of being able to cure cancer will depend on continued research that results in new surgical techniques, chemotherapy drugs, and radiation techniques in the years to come.

We hope that totally new technologies such as gene therapy and immunotherapy, in addition to better technology for early detection or prevention of cancers, may lessen the impact of cancer on each and every one of us. Breakthroughs such as these begin in the laboratory and eventually progress to clinical trials.

A clinical trial is a research study conducted with cancer patients to evaluate a new treatment. If a new treatment is demonstrated to be effective in clinical trials, it is then adopted as standard therapy for cancer patients. Participation in a clinical trial is voluntary. To find out if you may be eligible for participation in a clinical trial, ask your doctor.

Research is subject to rules and regulations established by the National Institutes of Health and the University of Michigan. These rules are designed to protect the safety of patients and to ensure that research is of the highest quality. A patient enrolled in a clinical trial is not a “guinea pig,” but is instead contributing generously to our ability to understand how to best treat cancer patients.

Research is funded in a number of different ways. Some projects are funded by federal research grants, while others may receive funding from independent agencies such as the American Cancer Society, from companies investing in cancer treatment technologies, and by gifts from individuals in support of research.

Gifts

Gifts from individuals, families and corporations help greatly in the search for a cure for cancer. If you or a family member are interested in contributing financially to cancer research, please discuss this with your doctor.

Next Steps

Emotional concerns during and after treatment

It is normal to feel many different emotions when you are dealing with a serious illness. You may be worried about possible losses of relationships, job changes, and your ability to carry out your daily activities in your personal and professional life. It is common to feel overwhelmed with all the information given. It is not unusual to have concerns related to life and death. Some people find it very helpful to:

- Write down questions that come to mind and prioritize them so you focus on the most important. Record the answers once received.
- Bring a family member or a friend with you to your appointments to help you remember the information.
- Take one step at a time, focusing on one issue at a time. Looking down the road into the future can often seem overwhelming, but broken down into smaller pieces, it can be easier to handle.
- Allow friends and family members to assist you in completing tasks that need to be done. For example, cutting the lawn, doing laundry, shopping for groceries. People often want to help, but don't know how or what to do.
- Give yourself permission to get what you need. If you do or do not want people visiting, make it clear when and how often. For example, if you are not feeling up to a family get-together, it is okay to limit time spent at an event or not to go.

After treatment is completed, it is common to be uncertain about the future. Many women experience heightened awareness of body sensations and may have fear related to follow-up appointments and exams. Transitioning back into the role of being well is often difficult, and family and friends may have different expectations than you do. It is important to be frank when communicating your needs to those around you.

Fear of cancer recurrence is also common. Individuals (patients and family members) all cope differently. You may also become uneasy when treatment ends and you are seen less often by your health care team.

Some patients will continue to see their oncology health care team after treatment is done. If you don't need to continue to see your oncology team, they can assist you as you transition back to your primary care doctor. Talk with your oncology social worker if you have any concerns. They can help find qualified mental health professionals in your community and can assist in finding support groups.

One of the most important things you can do as a patient is to keep the lines of communication open between your oncology team and your primary care doctor. If you have any questions on how best to do this, please ask. We are here to help.

Sexuality

Many women are able to continue with normal sexual function despite having undergone cancer therapy. However, sexual function may be affected by several aspects of cancer treatment. These include:

- Healing from surgery, radiation and/or chemotherapy.
- Vaginal dryness.
- Hormone effects.
- Changes in self image.

After surgery, do not resume having intercourse until healing is complete. Although healing for most cancer patients is often complete in six to ten weeks, you should ask your doctor or physician assistant about this.

There are many treatments that can help with sexual function, such as vaginal dilators or lubricants, changes in hormone replacement, adjustment of pain medications, or counseling. These may be helpful depending on the type of sexual difficulty you experience. If you have other concerns about sexuality, please talk to your doctor or nurse.

Support Services and Resources

There are numerous support services and resources available to help you through treatment and recovery. Some of these include:

- Chemotherapy information, along with management of side effects.
- Complementary Therapies – Art, Music and Guided Imagery.
- Families Facing Cancer.
- Grief and Loss.
- Life Images.
- Nutrition Services.
- Cancer Education Program.
- Physical Therapy (PT) and/or Occupational Therapy (OT).
- Patient Assistance Program – Wig Bank, Financial Assistance, etc.
- PsychOncology Clinic.
- Radiation therapy information, along with the management of side effects.
- Social Work.
- Spiritual Care.
- Support Groups.
- Symptom Management and Supportive Care.
- Voices Art Gallery.

For more information on these services, call: (877) 907-0859 or visit:

www.RogelCancerCenter.org

Included in the back pocket of this handbook you'll find additional resources that may help you through treatment and recovery. Additional information can be obtained by calling the Cancer Education Program at (734) 647-8626 or emailing CCC-PERC@med.umich.edu.

Glossary of Terms

Alopecia – Partial or complete loss of hair. This may result from radiation to the head, or from certain chemotherapy drugs.

Anemia – A condition when there is a decrease in the number of red blood cells or in hemoglobin.

Anti-emetics – Drugs given to prevent or minimize nausea and vomiting.

Ascites – An abnormal fluid collection in the abdomen from cancer or other causes.

Biopsy – The surgical removal of a small portion of tissue for diagnosis.

Blood cells – Cells that make up blood are formed in the bone marrow. These include:

- **Red blood cells** – (Erythrocytes; RBC) cells that carry oxygen throughout the body (measured by the hematocrit or HCT).
- **White blood cells** – Cells that help the body defend against foreign substances. Neutrophils are the most important type.
- **Platelets** – Cells necessary to help form a clot and stop bleeding.

Brachytherapy – The use of a radioactive “seed” temporarily implanted directly into a tumor. This allows a very high, localized dose of radiation to be given to a tumor, while limiting significant radiation exposure to other tissues.

Chemotherapy – The treatment of cancer by drugs designed to kill cancer cells or stop them from growing. See the ***Chemotherapy and You*** booklet from the National Cancer Institute.

Clinical trials – The process by which new cancer treatments are tested in humans. Clinical trials are conducted after preliminary testing has shown that a new treatment might be effective. For more information, see the booklet ***Taking Part in Cancer Treatment Research Studies*** from the National Cancer Institute.

You can also find information on open clinical trials at www.nci.nih.gov.

Cone biopsy – The removal of a cone-shaped piece of tissue from around the opening of the cervix.

Colony Stimulating Factor – A substance that stimulates the growth of bone marrow cells. Treatment with colony-stimulating factors (CSF) can help the blood-forming tissue recover from the effects of chemotherapy and radiation therapy. These include Granulocytes colony-stimulating factors (G-CSF, Neupogen and Neulasta are some trade names).

Complete Blood Count – (CBC) A blood test that determines the number of red blood cells, white blood cells and platelets in the blood.

Debulking – A surgical procedure that removes a significant part or most of a tumor. This may make future chemotherapy or radiation more effective.

Effusion – A collection of fluid inside a body cavity, such as around the lungs, (pleural), intestines (peritoneal) or heart (pericardia).

Electrolytes – Certain chemicals including sodium, potassium, chloride and bicarbonate, found in the tissues and blood. They are often measured to monitor toxicities, effects of treatment, etc.

Emesis – Vomiting.

Enteral feeding – Administration of liquid food (nutrients) through a tube inserted into the stomach or intestine.

Epidural – The space just outside the spinal cord. Catheters may be inserted into this space to deliver anesthetics or morphine for pain control.

Estrogen – The female sex hormone produced by the ovaries. Estrogen controls the development of physical sexual characteristics, menstruation and pregnancy. Synthetic forms are used in oral contraceptives, estrogen replacement therapy, and other various therapies.

Extravasation – Leakage into the surrounding tissues of intravenous chemotherapy drugs from the vein being used for the infusion or injection. Extravasation may damage tissues.

Frozen section – A procedure done by the pathologist during an operation to give the surgeon an immediate answer as to whether a tissue is benign (noncancerous) or malignant (cancerous).

Grade of tumor – A way of describing tumors by their appearance under the microscope. Low-grade tumors are slow to grow and spread, while high-grade tumors grow and spread rapidly.

Guiaic test – A test to see if there is hidden blood in the stool.

Hematocrit – A way of measuring the red blood cell content. A low hematocrit is a sign of anemia.

Hematuria – Blood in the urine. This may be seen easily by the naked eye (gross hematuria) or it can be hidden (microscopic hematuria).

Hemoglobin – A way of measuring the oxygen carrying ability of the blood.

Immunosuppression – The state of having decreased immunity and thus being less able to fight off infection.

Intravenous (IV) – Within or through a vein.

Ileostomy – An artificial opening in the skin of the abdomen, leading to the small bowel. Similar to a colostomy.

Laparoscopy – A type of surgery using a very small camera and instruments that are inserted into the abdomen through small, band-aid sized incisions in order to perform complex surgeries. The small incisions allow faster healing and cause less pain than conventional surgery.

Malaise – The feeling of tiredness, lack of drive.

Metastasis – The spread of cancer from one part of the body to another. Cells that spread are like those of the original cancer. For example: Ovarian cancer cells may spread (metastasize) to the lymph nodes and cause the growth of a new tumor. When this happens, the disease is called metastatic ovarian cancer. It is important to note that the cancer is still considered to be ovarian in origin because the tumor is made of abnormal ovarian cells.

Mucositis – Inflammation and soreness of mucous membranes such as tissue lining the mouth or throat. This is sometimes a side effect of chemotherapy or radiation.

Nadir – The lowest point at which the blood counts drop after chemotherapy.

Nephrotoxic – Medications or drugs that are toxic to the kidneys.

Neuropathy – This is a side effect caused by a few chemotherapy drugs, that causes numbness and/or tingling in the fingers and toes.

Oophorectomy – The surgical removal of one or both ovaries.

Paracentesis – A procedure in which fluid is taken out of the abdomen by a very thin catheter.

Petechiae – Small red spots under the skin caused by a low platelet count.

Port – An implanted, reusable IV to administer chemotherapy. Once placed, an IV can be easily connected to the port again and again without having to start a new IV in the arm.

Protocol – A formalized outline or plan such as a description of what treatments a patient will receive and exactly when each should be given.

Residual disease or Residual tumor – Cancer that remains after surgery or other treatment.

Robotic surgery – A type of laparoscopy using very small instruments controlled by the surgeon using robotic arms. This allows complex surgery to be performed through very small incisions. This is called the daVinci system.

Sentinel Node - Injection of dye at beginning of surgery to find the most susceptible node where cancer might have spread.

Stage – Refers to the mapping of where cancer may or may not have spread. Determination of the stage is very important for planning the most effective treatment for a cancer by taking into account where the disease is located.

Stomatitis – Inflammation and soreness of the mouth. This is sometimes a side effect of chemotherapy or radiation.

Transfusions – The infusion of any blood cell product. Example: red blood cells, platelets.

Notes:

Please use this section of the handbook to write down any questions you may have for your oncology team.

Notes:

Author: R. Kevin Reynolds, MD

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