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Healthcare Team and Expectations

Working with Our Health Care Team

You are now part of a team. Your team members are your family or support group, your doctor and his or her staff of nurses, medical assistants and others. One of our goals is to help you to be prepared to manage any side effects of your therapy. You are the one who profits the most in this team effort. We, at Utah Hematology Oncology, want to help you with every aspect of your disease. Whether your concern is due to your physical or mental wellbeing, we are here. We cannot help if we do not know you are having problems, so **communication** is important. **Please feel free to ask questions and tell us your concerns. This is a vital part of your treatment.**

To assist you during your treatment, here is the **Utah Hematology Oncology (UHO) team:**

- **Medical Oncologists/Hematologists**: **Dr. Carl Gray** and **Dr. Belisario Arango**.
- Our N**urse practitioners** are **Jan Davis, ACNP; Lynn Larsen, NP-C; and Kelly Mikesell, PA-C.**
- **Registered Oncology Nurses** administer chemotherapy treatments, assist in education, help manage side effects, and will answer your questions about your diagnosis and treatment.
- **Medical assistants & Phlebotomists** help the physicians and nurse practitioners during your examinations, administer shots, and draw basic bloodwork.
- **Receptionists** will greet you when you arrive and help schedule your appointments.
- **Our financial team** will help with billing and insurance issues at **801-689-3900.**
- **Our Patient Financial Advocate** is **Mindy** at **801-689-3902**
- **Medication Refills: Lori** at **801-689-3910.** Please have the bottle with you when you call. This ensures you get the correct strength and dosage. Also, please do not wait until you are completely out before calling for a refill. If possible, have refills completed at your doctors' visit. Once you have left a request, please allow 48-72 hours for refill processing and call the pharmacy. If you want to check the status of your request, please contact the pharmacy before calling our office.
- If you need questions answered, please call our office 801-476-1777. Your calls are important to us and we will do our best to answer them promptly. If you are asked to hold, please know we are assisting other patients. If you cannot hold, please leave a message and we will return your call as quickly as possible. We appreciate your patience.
- **For additional information visit our web site at http://www.utahhemonc.com**
- **Please watch for an email to register for our portal to review your own lab results and information.**

When you come in for **follow-up appointments**, check in at the receptionists' desk. They will give you further instructions. If blood needs to be drawn, a phlebotomist from our lab may draw it or if you have a port it may be a RN, or if you just need a CBC or PT/INR the MA will draw it. Please check in 15 minutes before you are to see the physician. This will allow time for lab work if needed. We recognize your time is just as valuable as ours. Keep in mind that **you may not be called back in the order that you arrive** as there are multiple schedules going on.

Clinical Trials

Community Cancer Trials of Utah (CCT), LLC is an independent, community practice-based research organization intended to **provide cancer patients with access to high-quality clinical trials in their own community**, away from the stresses, inconveniences and high cost of an academic medical center or hospital-based system. (CCT) is affiliated with Utah Hematology Oncology, PC and CCT's activities are conducted in cooperation with UHO's providers and staff and at UHO facilities. Your providers are in the best position to determine whether a specific trial is right for any given patient. While it may be appropriate to enquire about one of our trials for your condition, participation may not be a possibility due to defined selection criteria.

About Cancer and Goals of Treatment

What is Cancer?

Cancer is the **uncontrolled growth and spread of abnormal cells in your body**. Normal cell growth is usually controlled. Cancer cell growth is not only uncontrolled but the cells that are growing and dividing are abnormal. Cancer cells divide more frequently and live longer than normal cells.

Cancer does not always present itself as a tumor. Some types of cancer cells circulate in our blood or lymphatic fluid. They create problems by taking up space that should be occupied by normal blood or lymph cells. These are cancers like leukemia or lymphoma. Biopsies or specific blood tests are often necessary before a diagnosis can be confirmed.

The smallest clinically detectable mass or tumor has at least 10 billion cells. Therefore, even after we no longer see a cancer, treatment may be continued for a period of time. A person who has had cancer is considered to be in remission when there is no evidence of that disease for at least five years.

There are more than 100 different types of cancer. Approximately one in three people will have a type of cancer at one time in their lives. Four out of 10 people with cancer will be cured.

Treatments for Cancer

From the medical perspective, there are three ways to treat cancer.

- Surgery
- Radiation
- Chemotherapy/Targeted Therapy

Sometimes more than one treatment will be used. This is called combined modality treatment. For example, radiation and/or chemotherapy may be used to first shrink the tumor followed by surgery. Surgery may be performed first to remove the bulk of the tumor and determine the extent of involvement. This is often followed by chemotherapy and/or radiation.

Chemotherapy is often chosen as the preferred medical treatment. This is because chemotherapy circulates in your blood stream and attacks cells throughout your body. Radiation and surgery usually concentrate on very specific areas.

Goals of Treatment

Three possible goals with chemotherapy treatment are:

- Cure: Absence of disease.
- Control/Maintain, to prevent further spread of disease.
- Palliation: Relief of symptoms produced by cancer.

Even when a cure is unlikely, chemotherapy and radiation may still be used to help control disease growth or to try and bring some comfort from disease related symptoms like pain or swelling. This is called palliation.

Common Treatment Options

Targeted therapy- These drugs work to target specific cancer cells or molecular targets. They work differently than antineoplastic agents. They work in different pathways depending upon the genetics or mutations found in your particular cancer type.

Targeted therapies differ from standard chemotherapy in several ways:

- Targeted therapies **act on specific molecular targets** that are associated with cancer, whereas most standard chemotherapies act on all rapidly dividing normal and cancerous cells.
- Targeted therapies are deliberately chosen or designed to interact with their target, whereas many standard chemotherapies were identified because they kill cells.
- Targeted therapies are often cytostatic (that is, they block tumor cell proliferation or growth), whereas standard chemotherapy agents are cytotoxic (that is, they kill tumor cells).

Types of Targeted therapy:

- **Immunotherapy/Biotherapy** trigger the immune system to destroy cancer cells. Some immunotherapies are monoclonal antibodies that recognize specific molecules on the surface of cancer cells. Binding of the monoclonal antibody to the target molecule results in the immune destruction of cells that express that target molecule.
- **Immune checkpoint inhibitors**: These drugs basically take the 'brakes' off the immune system, which helps it recognize and attack cancer cells.
- **Angiogenesis inhibitors** block the growth of new blood vessels to tumors (a process called tumor angiogenesis). A blood supply is necessary for tumors to grow beyond a certain size because blood provides the oxygen and nutrients that tumors need for continued growth. Treatments that interfere with angiogenesis may block tumor growth. Some targeted therapies that inhibit angiogenesis interfere with the action of vascular endothelial growth factor (VEGF), a substance that stimulates new blood vessel formation. Other angiogenesis inhibitors target other molecules that stimulate new blood vessel growth.

Chemotherapy means **chemical treatment**. It is the use of chemicals to treat a problem. For example, Tylenol could technically be considered chemotherapy for a headache. But society has come to associate the word "chemotherapy" specifically with cancer. In this case, the chemicals **are used to interfere with cell growth and cause the cell to die or prevent them from growing.** Another word you may hear is **antineoplastic**.

Will Chemotherapy Hurt Some of My Good Cells, Too?

Yes. Unfortunately, chemotherapy cannot tell a normal cell from a cancer cell. It can, however, attack a cell in a specific phase of cell division. This is one way chemotherapy works. Cancer cells, like your hair cells and the cells lining your gastrointestinal tract (mouth to rectum), divide more frequently. Because of this, they are more vulnerable to the insult of chemotherapy.

Normal cells will be replaced by your bone marrow during the recovery period between chemotherapy cycles. Cancer cells, since they are abnormal, hopefully will not regrow and will be further eliminated with repeated treatments of chemotherapy.

Remember, cancer cells divide and multiply more often than normal cells. Therefore, they are more likely to be destroyed with the chemotherapy.

Hair Loss

Your nurse will tell you if hair loss is common with the medicines you are going to receive. Hair loss can occur slowly and may result in some thinning or it may happen very quickly, coming out in clumps. **If you are experiencing dramatic hair loss you may want to cut your hair.**

For some people, this side effect is the most difficult because it affects appearance. You may want to buy a wig, hat or experiment with some scarves to help you prepare. It is often easier to buy a wig before your hair is gone if you wish to have the wig match your current hair color and style.

After chemotherapy, your hair will begin to grow at approximately 1/2 inch per month. Sometimes hair grows back a different color. It may return curly when it used to be straight or vice versa.
It is recommended that you **do not color or Perm hair for about 6 months after treatment**.

You may want to

- Buy a wig, hat or scarves.
- Discuss your concern with your family and friends.
- Avoid perms or color treatments. Your hair might not fall out as quickly.
- Place a towel on your pillowcase at night to help contain the hair you lose at night.
- Cut your hair short with an electric razor, but **DO NOT shave your head**.

If you lose your hair, you will become colder faster, wear a hat, nightcap, scarf or turban to conserve body heat. You may also lose other body hair. This is less common but sometimes men will not have to shave as frequently, or women might have to pencil in their eyebrows. This is only temporary. The only time hair loss is permanent is when the hair follicle dies. This occurs with radiation to the head.

Medications/ Safety/ Alternative

- Before starting treatment, make sure you **tell your doctor about any other medications you are taking** (including prescription, over the counter, vitamins, **herbal** remedies, etc.). Some of these may interfere with your treatment or cause more side effects.
- **You may continue to use over-the-counter cold, bowel, headache, and skin care medications as needed,** unless otherwise directed.
- **ONLY If you are told** your **platelet counts are low then**, **avoid Ibuprofen, Aspirin, Meloxicam and herbs** such as; cat's claw, dong quqi, evening primrose, feverfew, garlic, ginkgo, red clover, horse chestnut, green tea, ginseng (all have antiplatelet activity). Discuss with your doctor when it might be safe to resume.
- Do not receive any kind of **immunization or vaccination** without your doctor's approval while receiving treatment.
- **Inform your health care professional if you are pregnant or may be pregnant** prior to starting treatment.
- For both men and women: **Do not conceive a child (get pregnant) while taking Chemo**. Barrier methods of contraception, such as condoms, are recommended. Discuss with your doctor when you may safely become pregnant or conceive a child after therapy.
- **Do not breast feed** while undergoing treatment.
- **Some medications can cause visual changes, dizziness and tiredness**. If you have any of these symptoms, use caution when driving a car, using machinery, or anything that requires you to be alert.

It takes a few hours for your body to break down and/or get rid of most chemotherapy drugs. During this time, a small amount of chemotherapy comes out in your urine, stool, and vomit. It is unlikely that it should cause any problems if family members handle any fluids. Good hand washing is always recommended, and if you have further concern waterproof gloves may be used.

Safe Use of Alternative/Complementary Cancer Treatments

We will be treating you with **proven therapies** that have gone through rigorous testing to show that they are effective. If you are participating in a clinical trial, you may be given additional medications that is still undergoing evaluation. There are many **complementary methods** you can safely use along with standard treatment to relieve symptoms or side effects, to ease pain, and to help you better enjoy life.

Here is a partial list of some complementary methods some people have found helpful when used along with medical treatment:

- Aromatherapy
- Art therapy
- Biofeedback
- Garlic and herbal teas
- Massage therapy
- Meditation
- Music therapy
- Prayer & spiritual practices
- Yoga

If you are thinking about using any **alternative therapy**, please talk to your doctor. Often patients do not tell their doctors about their decision. At times, **these medications may make the traditional treatment ineffective or worsen side effects.** There is a great deal of interest today in alternative and complementary therapies. Mass communication, especially the Internet, makes it possible for people to share ideas and information very quickly. But **too often information on the Internet is written by promoters of useless treatments**.

When to Call

When to Contact Your Doctor or Health Care Provider:

Seek emergency **help immediately** and notify your health care provider, it you experience the following symptoms:

- Shortness of breath, wheezing, difficulty breathing, closing of the throat, swelling of facial features, hives (possible allergic reaction).
- Chest pain or pressure.
- Development of confusion, hallucinations or seizure.
- **Fever of 100.5° F (38° C) or higher,** chills (possible signs of infection).
- Urinary retention or inability to urinate.
- Significant bleeding from nose, mouth, vagina, rectum that does not stop within 15 minutes.
- Symptoms associated with a possible blood clot, such as: chest pain or pressure; pain in your arms, back, neck or jaw; numbness or weakness on one side of your body; trouble talking; sudden or severe headache; sudden vision changes.

The following symptoms require medical attention but are not an emergency. Contact your health care provider **within 24 hours** of noticing any of the following:

- Nausea (interferes with ability to eat and unrelieved with prescribed medication).
- Vomiting (vomiting more than 4-5 times in a 24-hour period).
- **Diarrhea** (if **more than 3-4 liquid bowel movements in a 24-hour period**).
- Constipation- Call if more than 3 days without a bowel movement (unless this is normal for you).
- **Unable to eat or drink for 24 hours or have signs of dehydration**: tiredness, thirst, dry mouth, dark and decreased amount of urine, or dizziness (particularly with standing).

- Extreme fatigue (unable to carry on self-care activities or get out of bed).
- Unusual bleeding or bruising.
- Black or tarry stools, or blood in your stools.
- Blood in the urine, pain or burning with urination.
- Lip or mouth sores (painful redness, swelling or ulcers; white patches or film in mouth),
- Swelling, redness and/or pain in one leg or arm and not the other.
- Yellowing of the skin or eyes.
- Cough, shortness of breath.
- Muscle cramps or twitching.
- Swelling of the feet or ankles.
- Change in hearing.
- Dizziness, confusion or visual changes.
- Skin Rash.
- Eye irritation.
- Tingling or burning, redness, swelling of the palms of the hands or soles of feet.
- Signs of infection (sweats, cough, flu-like symptoms, shortness of breath, blood in your phlegm, sores on your body, warm or painful areas on your body).
- Bad sore throat, ear or sinus pain, cough, more sputum or change in color of sputum, pain with passing urine, mouth sores, wound that will not heal, or anal itching or pain (possible signs of infection).
- If you have redness or pain at the infusion or injection site.

Infection & Fever

We live in a world filled with germs and bacteria. Usually our bodies can keep us healthy. It does this with the help of our white blood cells. These cells recognize and fight infections. Extra precautions should be taken during some treatments to decrease the risk of infection.

Here are some things you should do if we tell you that you need to take precautions to lower your risk of infection:

- **Wash your hands thoroughly** and instruct other family members to do the same.
- Take your temperature if not feeling well and call us immediately if it reaches **100.5** degrees Fahrenheit.
- Stay away from anyone who is ill.
- Do not be the one to clean pets' environments (i.e., litter boxes, birdcages, etc.).
- Keep your mouth clean by brushing or rinsing after meals (see oral care).
- Drink fresh water.
- Do not use enemas, suppositories or douches unless you check with your oncologist.
- Discuss with oncologist prior to having any dental cleaning and work done.

Your doctor may decide to start a medication if your white blood cell count is low called growth factors, which are administered as an injection. These shots may cause some bone pain as they stimulate your bone marrow to produce white blood cells. We have found that taking “Claritin” (**loratadine**) 10 mg every day prior to a shot may help relieve the pain. You may restart this if bone pain continues after shots are done.

It is also remotely possible you will need to be hospitalized. We try to keep you out of the hospital, but sometimes it is necessary, especially if you are feeling extremely ill with your fever. If you notice any signs or symptoms of infection, call your doctor. These would include:

- A fever with or without chills that reaches 100.5 degrees Fahrenheit.
- Burning, frequency or urgency of urination.
- Sores or pain in the mouth or throat.

- A new cough or colored sputum (white, yellow, green or brown).
- Swollen, red, painful areas of skin.
- Draining wound(s).

Fluids & Nutrition

Why is drinking fluids so important?

In our bodies, water performs the following functions:

- Helps to keep cells, joints and other tissues lubricated
- Helps to maintain body temperature
- Plays and important role in metabolic activity
- Helps maintain muscle tone
- Helps rid the body of waste
- Transports needed nutrients

How much do you need to drink?

- The recommended fluid intake per day ranges from **1.5 to 3.5 liters** (1quart is about 1 liter).
- One way to figure out how much you need is to divide your weight in pounds by 2. This is the number of ounces you need for one day (8 ounces =1 cup).
- You may need more fluids if you are experiencing increased demands of disease and treatment; have increased metabolic activity, have a fever, or experiencing diarrhea.
- **Water should be the mainstay** of your fluid intake.

Many patients find they feel better if they drink at least three liters per day!

What fluids should you drink?

To prevent boredom, **vary the beverages you drink**. Best choices are:

- Water, flavored water, seltzers.
- Juices, sports drinks (unless you are diabetic, or your doctor has told you to avoid these.)
- Fruit smoothies. Add fruit, ice cream, sherbet or sorbet to juices. Mix in a blender for a refreshing smoothie.

Following are several **ways to increase your fluid intake:**

- Set a goal and keep a record to see if you are reaching your target.
- Combine juices with seltzer and crushed ice.
- Keep fluids at hand in a cooler at your desk, in the car, or at home.
- Vary the fluids you drink. Try new beverages. Your tastes may change while on therapy.

Keeping a fluid diary journal

- Until you set a routine, it may be helpful to keep a journal of how much you drink.
- Many people think they are drinking more than they really are. A journal can help you see your true intake.

Are there any **fluids you should avoid or omit**?

- Avoid or limit alcohol.
- **Reduce your intake of drinks with caffeine**. Caffeinated drinks pull water out of your system and dehydrate you. Keep in mind that **no caffeinated drinks should count toward your fluid requirement**. For every caffeinated beverage you drink, drink an equal amount of water.
- Caffeine is present in coffee, teas (including iced), colas (including Mountain Dew), chocolate/cocoa.

How do you know if you are drinking enough?
There are a couple of ways you can tell if you are drinking enough.

- Check your urine color. Darker urine means you are not drinking enough while clear or very pale yellow means you are getting adequate fluids.
- **Dizziness** when changing positions, i.e. from sitting to standing, **may be a sign of dehydration**.

Staying hydrated is a simple way you can help yourself and ease your side effects.

Nutrition

Your food choices when you have cancer and are undergoing treatment may be quite different from what you are used to eating. The main goal is to try to keep your weight constant. In order to minimize weight changes, heal properly, and maintain the energy to cope with all the new challenges treatment may bring, you should try to eat a wide variety of high-calorie and high-protein foods, including the following:

- Milk, cream, and cheese
- Cooked eggs
- Sauces and gravies
- Butter, margarine, and oil

Sometimes, the dietary recommendations you receive from your nutritionist may sound like the opposite of a healthy diet. Your care team may encourage you to follow a high-calorie, high-protein diet, especially if you are feeling weak or are underweight. Although you may not feel well or may not feel like eating, proper attention to nutrition can assist in an easier recovery.

Supplements such as Ensure, or Boost may be recommended. Protein drink powders such as “Carnation Instant Breakfast” can also be used. Frequent smaller meals may also be better tolerated than larger meals. Adding protein rich snacks such a yogurt, cheese, or nuts.

We encourage you to eat fresh fruits and vegetables, but make sure to wash them well or peel them as you may be more susceptible to food borne illnesses.

Nausea and Vomiting

It is our sincere desire to make your treatments as tolerable as possible. Everyone is different, it may take a few adjustments in medications to find what works best for you. Do not feel that because you are receiving chemotherapy, you need to feel sick. **If what you have been prescribed does not work for you, please let us know**.

Difference between nausea and vomiting

Nausea is a feeling of sickness in your stomach. **Vomiting** is when **you actually throw up**. Just because you have one of these does not mean you will have the other. Our main goal is to prevent nausea and vomiting as much as possible.

New anti-nausea and anti-vomiting medicines have greatly decreased these problems from chemotherapy for many people. **We will administer preventative medications the day of treatment and prescribe anti-nausea medications** to be taken at home as directed.

Some self-help measures

- Eat small snacks five or six times a day. You may be able to eat sweet or salty foods better.
- Rest after meals. Excess movements may increase the nausea. If you recline after meals, make sure your head is four inches higher than your feet.
- Drink fluids often throughout the day. Try to drink at least two to three quarts of fluid a day.

- Strong odors from fragrances/foods can increase nausea.
- Sucking on lozenges and chewing gum may also help.

Foods to have on hand for nausea

- Popsicles
- Jell-O
- Broths
- Tea
- Saltines
- 7-up/Sprite
- Ginger ale
- Ginger snaps

If you are not keeping food and fluids down, please call and schedule to come into our office for possible IV hydration and IV anti-nausea medication.

About Anti-Nausea Medication you may be prescribed

- **Take anti-nausea pills preventatively as directed or at the first feeling of nausea.** Do not wait until you are vomiting, they cannot help you if they do not stay down.
- Zofran (ondansetron) 8 mg tablets to be taken by mouth every morning and evening (or every 8 hours if needed) for three days (or longer) following treatment. This is an effective medication to **prevent nausea**.
- Compazine (prochlorperazine) 10 mg tablets to be taken by mouth every 6-8 hours as needed. This is an effective medication if you are **already nauseated** but may also be helpful in preventing nausea.
- Phenergan (promethazine) 25 mg tablets to be taken by mouth every 6-8 hours as needed. **Phenergan can be taken with or without food.**

Mouth and Skin Care

Some treatments are more likely than others to cause mouth sores (also called mucositis). It is known that a good oral care regimen can help in preventing or decreasing the severity of mucositis and can help prevent the development of infection through open mouth sores. **The mainstay of an oral care regimen is mouth rinses,** and **numerous studies have determined that plain old salt water is the best and most cost-effective mouth rinse available. A mouth rinse will aide in removing debris and keeping the oral tissue moist and clean.**

What You Can Do

- Rinse mouth (swish and spit) before and after meals and at bedtime with either:
  - Normal saline (1 tsp of table salt to 1 quart (32 oz.) of water)
  - Salt and soda (1 tsp of salt and 1 tsp of baking soda in 1 quart of water). Mix fresh batch daily.
- Brush with a soft bristle toothbrush and warm water.
- Use only alcohol-free mouthwashes (unless prescribed by your oncologist.)
- Keep lips moist with a soothing lip balm.
- Drink approximately eight, 8 oz. glasses of fluid a day, unless you are on a fluid restriction prescribed by your doctor.
- If you have dentures, remove and rinse your mouth every four hours. If a sore develops and your dentures irritate it, remove dentures except for eating.
- Floss regularly and gently. If your gums become painful or if any bleeding starts, stop flossing.
- Dental care of any kind is best done before you begin chemotherapy. If it is needed during your treatment, please check with your oncologist first.
- Avoid irritating foods such as extremely hot foods (temperature); extremely acidic or spicy foods (tomatoes, grapefruits, oranges, Mexican foods); hard or sharp foods (dry toast, pretzels, etc.)
- **If you are having problems with mouth sores, please notify our staff** as we may need to intervene with additional medications.

Skin & Nail Care

Skin reactions to drug therapy are extremely common. All drugs may induce skin reactions, although if they do occur, they are usually mild, however, some skin reactions are serious and potentially life-threatening. Because of this, all drug-associated rashes should be reported to your health care professional for evaluation.

Sunscreen- In general, **treatments may make you much more sensitive to the sun.** You can experience a severe burn in a short period of time. Remember, sunscreen should be applied 30 minutes before you are in the sun. A sunscreen of at least SPF 15-30 is recommended.

Nail changes are common during chemotherapy and can include the development of lines as well as changes in the color or shape of your nails. The loss of nails may also occur, especially with chemotherapy drugs such as taxanes.

Diarrhea

Some treatments are more likely to cause diarrhea than others. Diarrhea is frequent soft or liquid stools with or without discomfort. Our concern is for you to maintain adequate hydration since **diarrhea can lead to dehydration**, drink 8-10 glasses of liquid a day. Diarrhea can also result in poor nutrition and sore, tender skin around your rectum. This all can weaken your body's ability to recover from your treatments.

- Generally, diarrhea is considered more than three loose or watery stools a day. You know what your normal bowel pattern for you. **Call us and report if more than 3-4 liquid bowel movements in a 24-hour period**.
- **The following foods can make the diarrhea or cramping worse: fatty, fried or greasy foods, spicy foods, high-fiber foods, bran and some cereals, raw fruits and vegetables, dried fruits, beans, popcorn, nuts, and chocolate.**
- **The BRAT diet can be helpful as noted below, and slowly add back other foods.**

Depending on the severity of your diarrhea, your physician may suggest a medication like Imodium. See below for dosing recommendations as it is different than package directions.

Imodium (loperamide):
Take 2 caplets (4 mg) first episode of diarrhea.
Then 1 caplet (2 mg) every 2 hours
(or 1 with each episode of loose stool)
May take up to 8 tablets (16 mg) daily

BRAT Diet-
Bananas
Rice (white)
Applesauce
Toast (white)

Keep a record of how many stools you have and how much anti-diarrheal medicine you take. This will be helpful for future occurrences. Other medications such as Lomotil or Paregoric may be added if needed.

Constipation

Constipation can also be a side effect of some treatments along with pain medications. Decreased activity, decreased fluid intake, or decreased nerve stimulus to your bowel because of a medication can leave you constipated.

Constipation is defined as irregular or infrequent hard stools that cause discomfort. You know what is normal for you. It may be normal for you to have a stool every second or third day. If your stool is not hard and does not cause you discomfort, you are not constipated. However, if you generally have a stool every morning and you miss a day you might consider some action.

To help prevent or deal with constipation:

- Increase fluid intake.
- Increase fiber in your diet.
- Respond to the urge to go to the bathroom.
- Avoid cheese, chocolate and eggs.
- Increase your activity, if possible.
- If you are taking a prescription of pain medicine, you should also take a stool softener daily such as **Colace** (Docusate sodium). Laxatives such as **MiraLAX** (Polyethylene Glycol), **Milk of Magnesia**, or **Senna** may also be recommended. Ask your doctor or nurse.
- Do not use an enema without your doctor's approval.

Call us if:

- You are concerned about your bowel status.
- You are oozing liquid stool.
- You start vomiting, feel nauseated and **have not had a stool for more than three days**.
- Your stomach is distended, feels very full or hard.
- You notice any blood in your stool.

Blood Tests and Anemia

A blood sample is usually taken before each treatment. Sometimes it is necessary to test your blood more frequently. If, in between treatments, you are feeling especially fatigued, it may be necessary to come in before your next scheduled appointment to have your blood tested.

In most cases, the blood counts we follow are the **white blood cell** count (infection fighter, normal 4.8 to 10.8), **hemoglobin** (carries oxygen throughout your body, normal 12.0 to 18.0), and your **platelet count** (this cell helps produce a clot and/or prevents bleeding problems, normal 130,000 to 440,000). Often, we do not see normal levels because of the disease process. More importantly, we compare the blood counts to previous results to identify changes.

What Happens to My Blood Counts After Chemotherapy?

(Dotted line symbolizes your blood count)

```
                *
Normal blood count range -  -  -                                              -  -  -  -  -  -  -  -
                                    -                                    -
                *                        -                            -
------------------------------------------------------------------------------------------------   Day
1                            Day 7        -      Day 14          -               Day 21
                                                   -                 -
                                                        -        -
                                                            -
```

Chemotherapy is given
Lowest blood count
Recovery of normal
blood count

How low a blood count goes, how quickly it drops, and how quickly it recovers, are to some extent an individual matter. The average number of days to the lowest blood cell count is approximately 14 days. The average recovery period is another seven days. Chemotherapy is not given again until the blood counts recover to a safe level.

Anemia

The word "anemia" means that the hemoglobin or red blood cell count is lower than normal. Hemoglobin carries oxygen around in your blood. When your hemoglobin is low, your energy level is also low. The main reason for anemia after chemotherapy is simply that the drugs have destroyed more red blood cells than your body is able to replace. The supply is less than the demand. Anemia does not always occur. If it does, it is usually only for a short period of time until your bone marrow is able to make enough blood cells to meet the demand. Occasionally, a blood transfusion is necessary, but this is not a common occurrence. Generally, transfusions are considered when the hemoglobin level is below 7, but this can vary for each patient. Usually people tell us they feel tired. Occasionally, people complain of other symptoms like shortness of breath or feeling their heart pounding in their ears. Energy conservation is the best thing you can do to deal with anemia. Limit your activities and rest frequently.

Emotional Changes and Fatigue

If you have been recently diagnosed with cancer or are undergoing treatment, it is important to **take special care of yourself**. Studies show that one of the best ways to do this is to **stay physically active**. That does not, of course, mean you should run a marathon or scale a mountain, but it is wise to **add some form of regular exercise to your daily life--even during cancer therapy**. Moderate aerobic exercise, such as riding a stationary bicycle or **taking a daily walk**, coupled with the use of light weights for strength training, can enhance physical well-being and spur recovery.

When someone is diagnosed with cancer, that person's entire collection of relationships is affected. It is said that the way you have tried to cope with other stressful times will be the way you try to cope with your illness and its treatment. This can be true for everyone involved.

Keeping family and friends informed and sharing how you feel will help you and may also help them to cope. Find a few special people to be your partners. They can help by listening, bringing you to appointments, helping with errands or other responsibilities. Try **keeping a diary** of what is going on and how you feel. This may increase your sense of control and help to put things in perspective.

It is a well-documented fact that people who try and hide their illness and have no extra emotional support do not fare as well as those with at least one confidant.

You will have good days and bad days. Take them one at a time. Set small, realistic goals for yourself each day. Do not consume yourself with anger over things you cannot control. **Your energy needs to be focused on what is good for you**.

Sometimes **support groups may be helpful**. You may ask the nurses and scheduling staff for information on what is available in your area. One out of three people develop some type of cancer. I t is not something to be ashamed of or feel guilty about, but something to be informed about. There are more successful treatments now than ever before. We are committed to help you by offering the best medical treatment possible.

Relationships- Your spouse or most intimate friend might find they just do not know what to say. You might, however, find they are the only one who really listens. Remember that your illness affects all who love you. They too might feel angry, sad, confused or helpless the best practice is to be as honest as possible about your feelings. Accept the feelings of others and surround yourself with people who care about you.

Personal counseling to help you deal with all that is changing may be greatly beneficial. It is not a sign of weakness to reach out for help but rather a sign of strength. Having the support of at least one person during your treatment course is a proven advantage.

Sexual Intimacy- Couples may wonder about their sexual intimacy. Treatment itself can decrease your libido for a period of time, you may not feel interest in your partner's needs. Talk with your partner, tell her or him how you feel. Good communication is an important part of maintaining a healthy sexual relationship with your partner. Vaginal dryness may also be a consequence of lowered hormone levels. A water-based vaginal lubricant may help. Sexual intercourse may not be an option for a while. Explore other ways to be intimate.

If you are receiving chemotherapy, remember that bodily secretions, especially urine, are considered to have the chemicals present for up to 48 hours. Please ask your medical staff for guidance if you have any questions.

Fatigue is a feeling of weakness, lack of energy and/or an increased need for sleep. For a long time, fatigue was not identified as a side effect of chemotherapy. This left people unprepared to deal with it, and they were discouraged because they did not understand why they felt so tired.

Your body has a lot of hard work to do after chemotherapy. It must get rid of the old cells and begin to make new ones. You can help your body deal with this demand by:

- Eating well.
- Resting between periods of activity.
- Decreasing the demand, you place on yourself.
- Discussing how you feel with your family and friends.

Chemotherapy is not the only cause of fatigue. Fatigue may result from stress, depression, pain, anemia, fear or a sudden change in your lifestyle. Talk with your doctor or nurse to help identify the possible cause and then to work on possible solutions. It may be very easy to help you feel a lot better or it may be a temporary side effect you may need to adapt to until the demands of both the chemotherapy and the cancer are decreased.

Exercise and Stay Active

Exercise Reduces Fatigue and Elevates Mood

Research has demonstrated that **those who moderately exercised regularly had 40% to 50% less fatigue**, the primary complaint during treatment. Exercise is known to improve cardiovascular function and to protect bones. It also **elevates mood**, offering drug-free relief for the feelings of depression that may accompany a cancer diagnosis. It can also help with constipation.

Finally, exercise **helps control weight**. A crucial factor, as studies have shown that gaining weight during and after treatment raises the risk of a cancer recurrence, particularly for breast, colon and prostate cancers.

When to Begin

The **sooner you start exercising, the better you will feel**, the fewer medications you are likely to need, and the lower your risk will be for complications. Consider starting an exercise routine before treatment gets underway, especially if you have been inactive. You may start slowly and progressing incrementally. Depending on fitness and comfort level, some people may want to **start with a 10-minute walk** around the block; others may find they can exercise for 20 minutes (or longer) right away.

- **Your goal should be at least 30 minutes of aerobic exercise five days a week** or more. **If you do not have the energy to exercise a full half hour, break it up; try three 10-minute walks during the day**.

Here are some additional suggestions:

- If you do not have the energy to exercise a full half hour, break it up; try three 10-minute walks during the day.
- Make exercise enjoyable; recruit a walking partner or listen to music with headphones while on a recumbent bike or treadmill.
- Dress comfortably and drink plenty of water.
- Warm up by swinging your arms or marching in place and cool down with gentle stretches.
- Do some **gardening or house cleaning**, both provide physical workouts.
- Consider **yoga and tai chi**; though not aerobic, they integrate movement and meditation and enhance wellness.
- Look for programs designed for cancer patients. Some health clubs and hospitals offer exercise classes that address the challenges and needs of people with cancer.
- Ask about a referral to **cancer rehabilitation** therapy.
- If on radiation therapy, avoid swimming pools; they can expose you to bacteria that may cause infections and the chlorine may irritate radiated skin.
- **Listen to your body**; do not exercise if you are not feeling well or running a fever.
- **Be cautious.** If you try to do too much, you may become discouraged and stop exercising altogether. On the other hand, if you were a regular at the gym before cancer, you may have to lower the intensity of workouts.