Common Chemotherapy Side Effects

Every person does not get every side effect of chemotherapy, and some people experience few, if any, side effects. The severity of side effects varies greatly from person to person.

**How Long Do Side Effects Last?**
Most side effects gradually disappear after treatment ends because the healthy cells recover quickly. The time it takes to get over some side effects and regain energy varies from person to person and depends on many factors, including your overall health and the specific drugs you are receiving.

Although many side effects go away fairly rapidly, some may take months or years to disappear completely. Sometimes the side effects can last a lifetime, such as when chemotherapy causes permanent damage to the heart, lungs, kidney, or reproductive organs. Certain types of chemotherapy occasionally cause delayed effects, such as a second cancer, that may show up many years later.

Patients often become discouraged about how long their treatment lasts or the side effects they have. If you feel this way, talk to your health care provider.

**Hair Loss**
Hair loss may be hard to deal with. Not all chemotherapy drugs will make you lose your hair, and some people only experience mild thinning.

Wigs and turbans are provided free of charge by the Donald W. Reynolds Cancer Support House (www.reynoldscancersupporthouse.org) at 3324 South M Street, Fort Smith. You can learn more about this and many other services by calling 479-782-6302 or 1-800-262-9917.

**Techniques to Help with Hair Loss**
- Use mild shampoos.
- Use soft hairbrushes.
- Use low heat if you must use a hair dryer.
- Don’t dye your hair or get a permanent.
- Use a sunscreen, hat, scarf, or wig to protect your scalp from the sun.
- Use a satin pillowcase.

**Anorexia** (lack of appetite)
Discuss this with your nurse or physician. Patients who maintain their weight or gain weight tend to do better while undergoing chemotherapy. Remember, the body is expending extra energy as it heals from the effects of surgery, chemotherapy, and radiation therapy. Your doctor may prescribe an appetite stimulant such as Megace or Marinol. Milkshakes and nutritional supplements are a plus.

**Nutrition**
Changes in taste and smell may continue as long as chemotherapy treatments continue, or even longer. Several weeks after chemotherapy has ended, taste and smell sensations usually return to normal (but not always). Foods that are high in protein and calories help your body rebuild after chemotherapy treatments.

**Nutrition Suggestions**
- On the days chemotherapy is given, patients should make sure they have had something to eat.
- Most people find that a light meal or snack before chemotherapy is best.
- Try eating small frequent meals.
- Let the health care team know when eating is a problem.
**Nausea and Vomiting** (feeling sick at your stomach)

Prevention of nausea and vomiting is the goal. As with many side effects, control of nausea is easier if it is prevented from ever starting. You will be given a prescription for anti-nausea medications for home, and you should be sure to have these available in case you need them. If these medications do not prevent nausea and vomiting, it is important to tell your doctor.

**Helpful Hints for Nausea**
- Eat 6-8 small meals a day, instead of 3 large meals.
- Eat dry foods, such as crackers, toast, dry cereals, when you wake up and every few hours during the day.
- Eat foods that do not have a strong odor.
- Eat cool foods instead of hot and spicy foods.
- Sit up or recline with your head raised for at least one hour after eating.
- Sip clear liquids frequently to prevent dehydration. Examples include broth, water, popsicles, and sports drinks.
- Avoid eating in a room that has strong cooking odors or other smells.
- Suck on hard candy, such as peppermint or lemon.

**Fatigue**

Fatigue is one of the most common side effects of cancer and chemotherapy. The fatigue a person with cancer feels is different from the fatigue of everyday life. It is unrelated to activity and may not be resolved with rest or sleep. Patients feel fatigue both mentally and physically. The best way to manage fatigue is a balanced diet, mild to moderate exercise, and lots of rest. Try to schedule the things most important to you in the mornings when you will have the most energy. Stay active, but don’t overdo it. Most importantly, ask family and friends for help.

**Peripheral Neuropathy**

Peripheral neuropathy is frequently described as a burning, tingling, or numbing type of pain in the hands and feet. It has many causes including some chemotherapy drugs. Let your doctor know when symptoms begin. Your physician can prescribe medications that can help alleviate these symptoms such as Neurontin or Lyrica. Non-pharmacological treatments such as massage or exercise may also be used.

**Skin and Nail Changes**

- You may have minor skin problems during treatment, including redness, itching, peeling, dryness, and acne.
- Some chemotherapy drugs may make your skin more sensitive to the sun. Use sun block. You may need to completely avoid direct sunlight. Wear long-sleeved cotton shirts, hats, and pants to block the sun.
- Your nails may become darkened, brittle, or cracked, or they may develop vertical lines or bands.

**Xerostomia** (dry mouth)

Saliva keeps our mouths moist, fends off cavities and aids in digestion of foods. A lack of saliva can affect your ability to chew, speak, swallow, and taste. Chemotherapy and radiation can damage the salivary glands temporarily or even permanently. Salegen can be prescribed to stimulate saliva production. Keep a glass of water with you at all times. Avoid mouthwashes containing alcohol, keep your lips moisturized, and chew sugarless gum to help stimulate saliva flow. Foods known to increase salivation are celery, carrots, citric acid, and lemons.
**Mucositis** (when the mucous membranes of the mouth become red, swollen and painful.)

This can happen 5-7 days following chemotherapy. Let your doctor know immediately when you have the first sign of mucositis. The doctor will give you a prescription for either *Nystatin* or *Miracle* mouthwash to help alleviate the pain. Do not use peroxide; this will only dry out your tissues. Do not use mouthwashes containing alcohol; this will further irritate the mucosal lining.

- Avoid tart, acidic, or salty foods and drinks such as citrus fruit juices, tomato-based foods, and pickled and vinegar foods.
- Avoid rough textured foods, such as dry toast, granola, and raw fruits and vegetables.
- Choose lukewarm or cold foods that are soothing. Try freezing fruits and suck on frozen fruit pops, fruit ices, or ice chips.
- Stay away from alcohol, caffeine, and tobacco.
- Avoid irritating spices such as chili powder, cloves, curry, hot sauces, nutmeg, and pepper.
- Season foods with herbs such as basil, oregano, and thyme.
- Eat soft, creamy foods such as cream soups, cheeses, mashed potatoes, yogurt, eggs, custards, puddings, cooked cereals, ice cream, casseroles, gravies, syrups, milkshakes, and commercial liquid food supplements (Ensure, Boost, Carnation instant breakfast…).)  
- Avoid commercial mouthwashes that contain alcohol (which will cause burning).
- Drink through straws to bypass mouth sores.
- Eat high protein, high calorie foods to speed healing.
- Rinse your mouth often with a baking soda and salt mouthwash *(made with 1 quart water, 1 teaspoon baking soda, and ¾ teaspoon salt)* to help keep your mouth clean and make you more comfortable. Be careful not to swallow the mouthwash.

**Diarrhea** (loose and watery bowel movements)

- Eat smaller amounts of food, but eat more often.
- Avoid high-fiber foods, which can cause diarrhea and cramping.
- Avoid coffee, tea, alcohol, and sweets.
- Stay away from fried, greasy, or spicy foods.
- Avoid milk and milk products if they make your diarrhea worse.
- Eat more potassium-rich foods such as bananas, oranges, and potatoes, unless your doctor has told you otherwise.
- Drink plenty of fluids to replace those you have lost through diarrhea. Make sure you drink 8-10 glasses of fluid a day to prevent dehydration.
- Mild, clear liquids, such as apple juice, water, weak tea, clear broth, or ginger ale are best. Make sure they are at room temperature and drink them slowly. Let carbonated drinks lose their fizz before you drink them.
- You may use Imodium A-D (over-the-counter) to help control you diarrhea.

If your diarrhea is severe (meaning that you have had 7 or 8 loose stools in 24 hours), tell your doctor right away. If your diarrhea doesn’t improve, you may need IV fluid to replace the water and nutrients you have lost.

**Constipation** (fecal matter passing more slowly through the intestines)

Constipation can lead to a fecal impaction that can require hospitalization and can be very serious. Let your doctor know immediately when you are experiencing constipation.

- Drink plenty of fluids to help loosen your bowel. Warm and hot fluids work especially well
- Eat lots of high fiber foods.
- Get some exercise. Simply getting out for a walk or a structured exercise program can help. Be sure to check with your doctor before increasing physical activities.
Reproduction and Sexuality

Hormonal disturbances:
Changes in hormone levels are a common side effect of cancer treatment for many men and women. These hormones include estrogen, progesterone, and testosterone. Changes in hormone levels may lead to symptoms, including hot flashes, bone weakening, mood changes, sleep and skin changes, and changes in the vagina and urination (for women).

Sexual changes men may experience:
- Most men on chemotherapy still have normal erections. A few, however, may develop problems. Erections and sexual desire often decrease just after a course of chemotherapy, but usually recover in a week or two.
- Many chemotherapy drugs can affect sperm and the testicles. Some of these effects may be permanent. Freezing sperm prior to chemotherapy is one option for men who wish to father children later in life. Although it is possible to conceive during chemotherapy, the toxicity of some drugs may cause birth defects; therefore, it is suggested that all men getting chemotherapy take precautions and use a reliable type of birth control if they are sexually active.
- Chemotherapy may suppress your immune system. If you have had genital herpes or genital wart infection in the past, you may have flare-ups during chemotherapy.

Sexual changes women may experience:
- Many chemotherapy drugs can either temporarily or permanently damage a woman’s ovaries, reducing their output of hormones. This affects a woman’s fertility and libido. Ovarian function is less likely to return in women over the age of 30 and they are, therefore, more likely to go into menopause. Symptoms of early menopause include hot flashes, vaginal dryness and tightness during intercourse, and irregular or no menstrual periods. Even though menstrual cycles may be disrupted or stopped with chemotherapy, it may still be possible to get pregnant at this time. The toxicity of some chemotherapy drugs may cause birth defects, and it is suggested that all women getting chemotherapy take precautions and use a reliable type of birth control if they are sexually active.
- Some chemotherapy drugs may irritate all mucous membranes in the body. This includes the lining of the vagina, which often becomes dry and inflamed.
- Vaginal infections are common during chemotherapy, particularly in women taking steroids or the powerful antibiotics used to prevent bacterial infections. Yeast cells are a natural part of the vagina’s cleansing system. If too many grow, however, you may notice itching inside your vagina, a whitish discharge that often looks like cottage cheese, or a burning sensation during sexual intercourse. Yeast infections can often be prevented by not wearing pantyhose, nylon panties, and tight pants. Loose clothing and cotton panties allow better air circulation. Your doctor may also prescribe a vaginal cream or suppository to reduce yeast cells or other organisms that grow in the vagina. It is very important to treat a vaginal infection if you are taking chemotherapy. Your body’s immune system is not as strong because of the treatment, and any infection may become a more serious problem if it is not dealt with as early as possible.
- If you have had genital herpes or genital wart infections in the past, you may have flare-ups during chemotherapy.
**Changes in Thinking and Memory** ("chemobrain")

Recent research has shown that chemotherapy can also affect the way your brain functions, even many years after treatment. The changes that have been found in patients are subtle, but the people who have problems are well aware of the differences in their thinking. Patients who have had chemotherapy and have this cognitive impairment often call this experience "chemo brain" or "chemo fog." Researchers are not sure exactly why chemotherapy affects the brain in this way or exactly how much chemotherapy (or in what combinations) it takes to cause this problem.

**What Can I do to Manage “Chemobrain”?**

Experts have been studying memory for a long time, and many resources are available to help you sharpen your mental abilities and manage the problems that may come with chemobrain. Some things that you can do include the following:

- Use a detailed daily planner. Keeping everything in one place makes it easier to find the reminders you may need. Serious planners keep track of their appointments and schedules, "to do" lists, important birthdays and anniversaries, phone numbers and addresses, meeting notes, and even movies they'd like to see or books they'd like to read.
- Exercise your brain. Take a class, do word puzzles, or learn a new language.
- Get enough rest and sleep.
- Exercise your body. Regular physical activity is not only good for your body, but also improves your mood, makes you feel more alert, and decreases fatigue.
- Eat your veggies. Studies have shown that eating more vegetables can help you maintain brain power.
- Establish routines. Pick a certain place for commonly lost objects and put them there each time. Try to keep the same daily schedule.
- Don't try to multi-task. Focus on one thing at a time.
- Track your memory problems. Keep a diary of when you experience problems and the events that are going on at the time. (You might track this in your planner.) Medicines taken, time of day, and the situation you are in may help you figure out what influences your memory. Tracking when the problems are most noticeable can also help you prepare by not planning important conversations or appointments during those times.
- Try not to focus so much on how much these symptoms are bothering you. Accepting the problem will help you deal with it. As many patients have noted, being able to laugh about things you can't control can help you cope. And remember, the problems are much more noticeable to you than they are to others. We have all had to laugh about "forgetting" to take the carefully composed grocery list with us to the store.

**Depression**

Depression is a common side effect of a person living with cancer, and it is treatable. Symptoms may include: frequent crying, lack of interest in normal activities, irritability, poor concentration, feeling of worthlessness, and thoughts of suicide.

**Power of Positive Thinking**

You can reduce your anxiety about treatment side effects by having a positive attitude, talking about your feelings, and becoming well informed about your cancer and treatment. In addition, planning ways to cope with possible side effects can make you feel more in control and help you keep your appetite.

For support, information, and classes, contact: Donald W. Reynolds Cancer Support House, 3324 So. M Street, Fort Smith, AR 72903, 479-782-6302, 1-800-262-9917, www.reynoldscancersupporthouse.org

**What Cancer Cannot Do**

- It cannot cripple Love. It cannot shatter Hope.
- It cannot corrode Faith. It cannot destroy Peace.
- It cannot kill Friendship. It cannot suppress Memories.
- It cannot silence Courage. It cannot invade the Soul.
- It cannot steal eternal Life. It cannot conquer the Spirit.