
Chapter 3 Chemotherapy & Other Treatment Options

THIS chapter has been developed to help you and your family understand chemotherapy.

It covers topics such as:

1. How chemotherapy works.
2. How it is given.
3. The importance of good nutrition.
4. The management of some of the more common side effects.

Cancer is often treated by a combination of surgery, radiation therapy, and chemotherapy. For some cancers, chemotherapy has proven to be a very effective form of treatment. This chapter presents a general overview of chemotherapy.

Perhaps, you will find you have more questions than are answered here. We encourage you to discuss any questions you have about your treatment or condition with your doctor or nurse.

WHAT IS CHEMOTHERAPY?

Literally, chemotherapy means the use of any drugs or medications (such as aspirin) to treat disease or illness. Today, however, chemotherapy refers to a form of cancer treatment, which uses drugs specifically to fight cancer cells.

HOW IS CHEMOTHERAPY GIVEN?

Chemotherapy can consist of one drug or a group of drugs that work together.

The most common ways of administration are:

- By mouth, in pill form
- By injection
- Intravenously, i.e. by I.V. (through a tiny catheter placed in a peripheral or central vein)

Sometimes, when the drugs are administered intravenously, medication may seep out of the vein. This may cause redness and a burning sensation at the I.V. site. Tell your doctor or nurse if this happens. Chemotherapy is painless but can cause temporary uncomfortable sensations such as nausea.

Chemotherapy reaches the cancer cells through the blood stream.

WHERE Will I HAVE MY TREATMENTS?

- Your doctor's office
- In the hospital
- At home

The location depends on the nature of the drugs, your insurance, and/or your choice or your doctor's choice.

HOW LONG AND HOW OFTEN WILL I RECEIVE TREATMENT?

Treatment schedules may vary from daily to monthly depending on:

- The kind of cancer you have.
- The drug or drugs used.
- How your body responds to the treatment.

It is important to tell your doctor what other medications you are taking, including heart medicine, before you begin chemotherapy.

HOW WILL I KNOW IF THE CHEMOTHERAPY IS WORKING?

When you visit the doctor's office, or if you are in the hospital regularly, your doctor and nurse will track your progress using different tests and/or exams, which may include:

- Blood tests
- X-rays
- Tracking your weight
- Physical examinations

WHAT SIDE EFFECTS MIGHT I HAVE?

The chemotherapy drugs use to fight cancer cells are very strong and can attack healthy cells as well. As a result, you may experience side effects from the medications. The most common side effects are:

- Nausea and vomiting
- Fatigue
- Hair Loss
- Most side effects are temporary. Once treatment stops, the healthy, normal cells grow back.

TIPS FOR COPING WITH SIDE EFFECTS OF CHEMOTHERAPY

- Nausea and Vomiting
- Chemotherapy drugs can cause nausea because they affect the stomach lining and the brain.
- Your physician may prescribe anti-emetics (anti-nausea medications) to help relieve the nausea you feel.

Tips on eating

- Eat several small meals rather than three large meals each day.
 - Avoid drinking water with meals, but drink water between meals to keep your fluid intake at a good level.
- Don't eat greasy or fried foods (such as roast duck).
- Avoid foods that are too hot or too cold.
 - Eat slowly.
 - Rest after eating. Instead of lying down, it is better to sit up or take a walk.
 - Avoid unpleasant odors.
 - Prepare and store food ahead of time to eat later when you are hungry.

Diarrhea

It is important to notify your doctor if diarrhea is severe or lasts more than 24 hours. Your doctor may prescribe medication to help control diarrhea.

If you experience diarrhea:

- Drink plenty of fluids.
- Eat potassium-rich foods such as bananas, oranges, potatoes, and peach or apricot nectars, unless your doctor tells you otherwise.
- Avoid coffee, tea with caffeine, alcohol, and sweets.

Mouth Sores

Chemotherapy drugs can cause your mouth to dry out or sores may appear on the gums, tongue, and sides of your mouth. These can be painful and make chewing and swallowing difficult.

It is important to take care of your mouth:

- Be sure to check your mouth daily
- Use a mouthwash as suggested by your doctor
- Keep your mouth and gums clean (use a soft toothbrush)

Eating tips to avoid irritating your mouth:

- Avoid very hot or cold foods
- Drink lots of liquids
- Eat moist foods such as ice-cream and fruit
- Blend food to a smooth consistency to make it easier to swallow

Fatigue

Chemotherapy drugs can attack healthy bone marrow (the place where blood cells are made) as well as the cancer cells in your body. This may result in lower production of red blood cells. The resulting anemia may cause fatigue. The signs and symptoms of anemia are:

- Feeling tired or "light-headed"
- Being short of breath

Be sure to get sufficient rest. Your doctor may decide to give you blood transfusions in order to treat the anemia.

Mild exercise, such as walking, is recommended to help regain your strength.

Bleeding

Because chemotherapy drugs also lower levels of platelets, which help the blood to clot, you may experience increased bleeding. Some signs and symptoms of bleeding associated with low platelet levels are:

- Bruises
- Blood in stool or urine
- Bleeding of nose or gums

It is important to take precautions to avoid bleeding:

- When shaving use an electric shaver.
- Do not cut or tear cuticles (skin around your nails).
- DON'T use aspirin.

Notify the doctor immediately if you observe any unusual bleeding.

Hair Loss

Some chemotherapy can cause either partial or total hair loss. Loss of hair can be emotionally upsetting. Try to talk to others about your feelings. Hair loss is temporary, and your hair will begin to grow back when treatments end.

Here are some tips to help you manage your physical appearance:

- Wear a wig
- Wear a scarf
- Wear a hat

Skin Chemotherapy may cause some irritation to your skin. Your skin may dry out, itch, etc.

You should:

- Use skin moisturizer or medicated soaps and creams.
- STAY OUT OF THE SUN. Skin is more easily burned by the sun's rays when undergoing chemotherapy.
- Use protective coverings such as hats or umbrellas.
- Use a sun block with a sun protection factor (SPF) of 15 or more.

Infection

Chemotherapy drugs also attack the production of white blood cells, which fight off bacteria. Therefore, you are more susceptible to infection.

Here are some tips to prevent infection:

- Wash your hands before meals and after using the bathroom.
- Avoid crowds and people with colds or flu.
- Avoid sharp objects, which might cut you. Clean all skin cuts thoroughly to prevent infection.
- When shaving, use an electric shaver.

The signs and symptoms of Infection Include:

- Fever
- Chills
- Sweating
- A burning sensation when urinating
- Severe cough or sore throat
- Diarrhea

If infection occurs, your physician may prescribe medication in the form of I.V. (intravenous) antibiotics to treat the infection.

Will MY SEXUAL ORGANS BE AFFECTED?

Though physical ability or desire will not be affected, fatigue may be a factor.

- Women: Your menstrual cycle may change; therefore, it is very important to use birth control while undergoing chemotherapy.
- Men: Chemotherapy may cause temporary or permanent infertility. Talk to your doctor or nurse if you have any concerns.

EATING WELL IS IMPORTANT

A balanced diet can help the recovery of normal cells. Therefore, your diet should consist of foods high in carbohydrates, vitamins, minerals, and protein such as:

- Meat, poultry, eggs, fish, nuts
- Vegetables and fruits
- Nutritional supplements such as Ensure, Instant Breakfast, or Boost.

Increased nutritional demands while undergoing chemotherapy require:

- 50% more protein
- 20-50% more calories

More fluid intake - increase fluids helps the kidneys flush out chemotherapy drugs.

YOUR FEELINGS

Talk to your doctor, friends, family members, and other patients about your feelings and concerns. Your emotional wellbeing is as important as your physical health.

You should:

- Keep a list of questions and concerns you have about your treatment and personal situation. Have the list with you at your next visit with your doctor as a handy reminder.
- Engage in your usual activities as much as possible.
- Treatments can be boring. Bring a friend; read a book; listen to music.

REMEMBER

You can take an active role to help yourself get through your treatment more comfortably by:

- Maintaining a positive attitude
- Drinking plenty of fluids
- Eating a balanced diet
- Getting sufficient rest
- Exercising as usual to help keep your mind and body in good health

Other Cancer Treatment Options:

Surgery

Surgery is performed for several purposes: to diagnose cancer by examining body tissue (biopsy), to remove precancerous or cancer cells. It provides the greatest opportunity to cure many types of cancer, particularly those that have not spread to other parts of the body. With today's advanced technology, surgery has become safer and less invasive. Nonetheless, before making the decision to undergo surgical treatment, you should understand the risks involved as with other cancer treatment options.

Complications during surgery is uncommon, but can involved the following:

- Extensive bleeding which may require blood transfusion
 - Damage to nearby organs or blood vessels
 - Reactions to anesthesia

After surgery, the most common problem is pain. There are many ways to deal with pain; discuss with your physician what works best for you.

Hormone Therapy

Sex hormones can stimulate the growth of prostate and breast cancer. Hormone therapy is a treatment option to remove the hormones or block their actions. The duration of such treatment is based on your age, the stage of your cancer, and other factors. Common side effects include:

- hot flashes
- nausea and vomiting
- loss of appetite
- In men, hormone therapy may cause:
 - impaired sexual function
 - loss of sexual desire

In women, patients may experience:

- mood swings
- blood clots
- vaginal dryness

Immunotherapy (also called Biological Therapy)

Immunotherapy helps patients to use their own immune system to fight against cancer. One approach is to stimulate the immune system to work harder; another is to use external sources. Cancer vaccines are a type of immunotherapy that seem promising but have not been approved by the FDA yet.

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