

CEF Chemotherapy



PMH

Information for Patients

What is CEF chemotherapy?

CEF chemotherapy is made up of three different chemotherapy drugs, Cyclophosphamide, Epirubicin and 5-fluorouracil. CEF is used to treat breast cancer.

How will I be given CEF chemotherapy?

You will receive CEF chemotherapy for 6 cycles. Each cycle is 28 days. This is how it works:

- We will give you Epirubicin and 5-fluorouracil through a vein in your arm using an intravenous line (IV) on the 1st and 8th days of each 28-day cycle.
- We will give you the treatment in the arm on the opposite side of your body from where you had surgery. The "surgery" arm will be used to take blood for blood tests.
- You will be asked to have a blood test before each treatment (before day 1, and sometimes also before day 8 depending on the doctor's orders) to check your blood counts to see if your counts are high enough for you to receive your chemotherapy.
- You will have your treatments at the chemotherapy Daycare Unit on the second floor of Princess Margaret Hospital.

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Author: Dr. David Warr, Dr. Natasha Leighl, Pamela Ng, Teri Vanderkooy, Marg Falconer

Created: 06/2005

Form: D-5131

- You will take Cyclophosphamide in pill form once a day for 14 days, with or without food. Please have the prescription for these pills filled at the retail pharmacy on the Main Floor in Princess Margaret Hospital.
- After 14 days of taking Cyclophosphamide pills, you will have a 2-week break. This allows your blood counts to return to normal before the next cycle.

What can I do while having CEF chemotherapy?

You can live a normal life while having this treatment. As long as you feel well enough, you can work and do your favourite activities and hobbies.

- Eat and drink normally while on this treatment. Eat healthy foods, (follow the Canada Food Guide). Your nurse can refer you to a nutritionist if necessary. Do not eat extra food - it is not necessary. You may drink alcohol if you wish (a glass of wine or beer daily).
- You will likely gain some weight while on chemotherapy, which is common. Please talk to your doctor or clinic nurse about how to avoid or manage this.
- Drink 4 to 6 glasses of fluid each day. Water is best, but any fluid such as soup or juice is acceptable. You do not need to drink more than this during the 6 months of treatment, except when taking Cyclophosphamide pills. Drink 1 or 2 extra glasses of fluid daily for the 14 days you are taking the pills to prevent cystitis (inflammation of the bladder).
- Some food and drinks may not taste the same as they did before. This will return to normal once the treatment has finished.
- If it fits with your treatments, you can take a vacation. Discuss it first with your doctor or nurse before making arrangements.
- Use a high factor sunscreen (30 SPF or higher) because you could burn in the sun while on chemotherapy. Wear light clothing and a hat also to prevent sunburn.

What are the side effects of CEF chemotherapy?

The most common or important side effects are:

Total temporary hair loss

Two weeks after the first C.E.F treatment, you will begin to lose hair. Your scalp may feel uncomfortable as the hair falls out.

- Use a gentle shampoo and a soft brush.
- Do not use hair spray, bleaches, dyes, or perms.
- Cover your head or use sunscreen on sunny days.
- Protect your scalp with a hat, scarf, or wig in cold weather.

You may also lose hair on other parts of your body. Your hair will grow back after your chemotherapy is finished. It may grow back in a different color or texture. Talk to your nurse about the wig boutique and the "Look Good, Feel Better" program. If you have a drug plan, it may cover a wig prescription.

Fatigue/Tiredness

All patients feel tired during treatment. You may feel more tired with each treatment cycle. After your treatment is complete, it may take 2 to 3 months for the tiredness to go away. Many patients do not work during this treatment.

- Talk about this with your doctor or nurse.
- Routine exercise is recommended, depending on your level of fitness .
- You can include walking, climbing stairs, cycling and even running, if you have done these activities before.

Red urine

Your urine will become pink or red for up to 24 hours after you receive the drug Epirubicin. This is normal and is due to the colour of the drug.

Nausea or vomiting

During your treatment we will give you medications to prevent nausea and vomiting. We will also give you a prescription for anti-nausea medications to take at home. Take the medications as directed. It is easier to prevent nausea than to treat it afterward.

If you have vomiting or severe nausea that lasts for more than 48 hours, call your chemotherapy doctor's office.

Increased risk of infection

During your chemotherapy you are more likely to pick up infections, especially when the white blood count (the part of the blood that fights infection) drops to a very low level.

This usually happens 2 to 3 weeks after treatment. About 8 out of 100 patients will get a fever due to an infection. Avoiding crowds will not reduce your chances of getting an infection -- but try to stay away from people you know have an infection.

- Wash your hands often and always after using the bathroom.
- If you feel hot, have chills, a cough or sore throat, or think you have a fever, take your temperature. **If your fever is 38.3°C (101°F), or above, see a doctor.** PMH does not have an Emergency Department, so please go to the Emergency Department at Toronto General Hospital or your local hospital.
- Do not take Tylenol® (acetaminophen).
- If you have any other concerns or need advice after hours, call 416-946-2000 and ask to speak to the nursing supervisor.

Menstruation

The chemotherapy may make your periods heavier or lighter, or they may even stop completely. The loss of periods is sometimes temporary (and sometimes permanent). If you are of child-bearing age, you will need to use birth control methods (but not birth control pills) during the first year after chemotherapy in case your fertility returns. You cannot use birth control pills during treatment because they are a breast cancer risk.

Fertility

If you are worried about having children, talk to your doctor. You should not become pregnant while on chemotherapy because we don't know how the drugs might affect an unborn baby. Ask your doctor or nurse about counselling and preventing pregnancy. If you have a baby, do not nurse your baby while having chemotherapy.

Menopause

If you are over 40, but are still having periods, your periods will likely stop during chemotherapy. This change is usually permanent, but there are a few women who do have periods again. If you do have periods again, you should use non-hormonal forms of birth control, as birth control pills contain estrogen and may increase the risk for the return of breast cancer. You may have other symptoms of menopause that can be disturbing, such as hot flashes, mood swings, fatigue, difficulty sleeping and a change in sexual desire. Each person experiences symptoms differently. Your doctor can prescribe medication for severe symptoms that are affecting your quality of life.

Sore Mouth

A mild sore mouth is a side effect of chemotherapy. This usually goes away when your blood counts return to normal. Keeping your mouth clean is the best way to prevent and reduce infections. To care for your mouth:

- Use a mouthwash of soda water or salt water (1 tablespoon of baking soda or salt in 1 litre of water). Alternatively, you may de-carbonate a bottle of Club Soda for a mouthwash. Use either of these options as a mouthwash, regularly (3 to 4 times a day) especially after eating.
- Rinse your mouth with water several times a day.
- Brush your teeth gently with a soft toothbrush after eating and before bedtime.
- Do not eat spicy, crunchy, or acidic food. Try chilled, soft, bland food instead.
- If you do get mouth sores, ask your nurse or doctor for a prescription for a pain medication and a special mouthwash.

Heartburn

You may develop indigestion with burning and burping. Your doctor can prescribe a medication for this.

Muscle/Joint aches

About 1 in 5 patients will start having aching muscles or joints about a month after treatment. This can last from months to 1 year. There is no treatment. The aches usually go away over time.

Eye changes

Your eyes may become red, teary, uncomfortable, and sensitive to light. You should not change your prescription eyeglasses while having chemotherapy.

Nail Changes

Fingernails and toenails may have colour changes (darkening). Some patients have discolouration of areas on the face. This will return to normal once you have finished your chemotherapy.

Skin reactions

Skin rash or reactions such as swelling, itching, and redness need to be reported to your doctor or nurse.

What are the later side effects of CEF chemotherapy?

Difficulty with memory or concentration

About 1 in every 5 patients will have a problem with memory or concentration after chemotherapy. This can take months or years to improve.

Weakness of the heart muscle

This rare complication is serious. It may cause shortness of breath. Although it cannot be cured, it can usually be helped with medication.

Leukemia

Patients receiving chemotherapy for breast cancer have a very small risk of developing leukemia. Leukemia is a cancer of the blood cells, and although very rare, can be life-threatening. The benefits from preventing breast cancer with CEF chemotherapy outweigh the risk of leukemia from the treatment.

Other information

1. Be cautious of other sources of "helpful" information from friends or even some other health-care professionals. They may mean well, but their advice may not be correct.
2. You do not need to take vitamins, but do so if you wish. Please advise your doctor or clinic nurse if you plan to take high dose vitamins or antioxidants as these may interfere with your treatment.
3. We do not recommend herbal or alternative therapies. They can be dangerous or toxic, especially for people on chemotherapy.
4. If you need dental work, wait until you've finished all 6 cycles of chemotherapy. Or, have the work done in the first 5 days of each cycle.
5. If you are having radiation therapy, this will not start until at least 3 to 4 weeks after your chemotherapy is complete.
6. You may have a flu shot if you wish, but we do not know how well it works for people receiving chemotherapy.
7. If you find yourself crying, unable to sleep, depressed or anxious, let us know. We have support systems to help you.
8. The Breast Cancer Resource Centre and Patient Library have information about managing side effects, as well as what supports are available.
9. If you call your doctor's office and get voice mail, please leave your name, telephone number, your medical record number (the 7 digits in the upper left of your hospital card) and a description of the problem.

Approved by: Princess Margaret Hospital Oncology Subcommittee, June 14, 2004