NEBRASKA CANCER SPECIALISTS
the Physicians of Oncology Hematology West

Chemotherapy-Induced Nausea and Vomiting

Nausea and vomiting are frequent side effects of chemotherapy and radiation therapy. Nausea and vomiting used to be one of the most debilitating chemotherapy side effects, but the development of more effective anti-nausea drugs has significantly reduced these side effects.

Nausea is feeling queasy or sick to your stomach, as though you're going to throw up. Vomiting is emptying your stomach by throwing up. Chemotherapy-induced nausea and vomiting can be acute (within the first 24 hours), delayed (vomiting that occurs after 24 hours), or anticipatory. Anticipatory vomiting is a conditioned response, which means it happens in response to a stimulus or trigger, like coming to the oncology office.

Why cancer patients experience chemotherapy-induced nausea and vomiting

A specific location in the brain controls emesis (vomiting). Emesis occurs when the vomiting center receives a signal from the brain, the gastrointestinal tract, or the inner ear.

Chemotherapy causes the release of a substance called serotonin (5-HT) and other chemicals in the small intestine, which signal the vomiting center in your brain to induce emesis.

Cancer treatments likely to cause nausea and vomiting

Certain chemotherapy drugs are more likely to cause nausea and vomiting than others.

Many chemotherapy treatment plans use more than one drug. The amount of nausea and vomiting produced by combination chemotherapy treatment is typically greater than the nausea expected from any single drug.

Managing nausea and vomiting

The best way to treat chemo-induced nausea and vomiting is to prevent it. Medicines for managing nausea and vomiting are called antiemetics. These drugs block the signal in the brain and stomach that causes nausea and vomiting.

There are many different types of antiemetics; your doctor may have you try more than one before finding the prescription that works best for you.

It is important to know antiemetics help reduce chemo-induced nausea and vomiting, but may not completely eliminate your symptoms. The dose may have to be changed, or you may need to be changed to a different antiemetic.

Other actions to manage nausea and vomiting

There are some things you can do to help prevent nausea and vomiting:

- Take your antiemetics as your doctor has ordered. If you have nausea or vomiting and cannot take your medication, call your doctor.
- Try eating foods and drinking beverages that have been easier for you to take or have made you feel better when you had the flu, morning sickness, or were nauseated on other occasions. These might be bland foods, sour candy, pickles, dry crackers, ginger ale, or flat soda, for example.
- Eat small, frequent meals (five or six), instead of three large meals each day.
- Do not eat fatty or fried foods, very spicy foods, or very sweet foods. If possible, have somebody else make the meals when you are nauseated. Do not eat your favorite foods when you are nauseated.
- If you have nausea and vomiting for only a few days after chemotherapy, cook and freeze several meals ahead of time that you can reheat during times when you are nauseated.
- Eat foods that are at room temperature or cold. The smells from hot foods may make your nausea worse.
- Keep your mouth clean; brush at least twice a day.
- Consider shakes or liquid nutritional supplements to help maintain your nutrition.
- Manage chemotherapy-induced nausea with relaxation techniques.
- Ask your doctor or nurse if they can help you learn a relaxation exercise. This may make you feel less anxious and more in control, and may decrease your nausea.

Controlling anticipatory nausea and vomiting

Anticipatory nausea and vomiting is not well controlled with standard nausea medications. In some clinical studies, drugs that treat anxiety (benzodiazepines) have provided some relief.

Alternatives to drug therapy may be available to you. These are sometimes known as cognitive or behavioral interventions, such as relaxation techniques. Your doctor can provide more information about alternatives that may be right for you.