

IN EVERY ISSUE

# Squashing a Queasy Stomach

BY DEBRA WOOD, RN

*How to avoid nausea and vomiting during treatment.*

Although common and of concern to patients, nausea and vomiting need not result from treatment. The American Cancer Society reports as many as 80 percent of patients experience nausea and vomiting during chemotherapy, but medication and other management options offer patients a break. While not all nausea can be prevented or treated, much progress has been made in calming a queasy stomach.

**CAUSES** > Chemotherapy agents stimulate certain parts of the digestive tract, as well as a specific area of the brain that controls vomiting. The risk of developing nausea and vomiting during chemotherapy depends on the agent, the dose, frequency given, route of administration, and patient factors such as age. Certain drugs, such as cisplatin and Adriamycin (doxorubicin), are more closely associated with this side effect. High doses of intravenous chemotherapy given frequently also increase the chance of gastrointestinal distress. Brain metastasis or tumors that obstruct the bowel can also cause such symptoms.

Nausea and vomiting more often occur with total body irradiation or radiation focused close to the abdomen or small bowel than with radiation to the arm, leg, head and neck, or breast.

The onset of nausea and vomiting can vary, with acute nausea and vomiting happening within minutes or several hours after treatment, and delayed nausea developing more than 24 hours after chemotherapy. Anticipatory nausea and vomiting occurs when a prior bad experience with treatment is triggered by certain aspects of the clinic visit and treatment.

Severity of nausea and vomiting is graded from one to five, with one being mild and five being death from complications such as dehydration. Nausea and vomiting can produce other serious consequences, including esophageal tears, aspiration of food into the lungs, wounds not healing, stopping treatment, and loss of functional ability.

**MANAGEMENT** > The best defense against nausea and vomiting is to stop it from

happening in the first place by using antiemetic drugs. With chemotherapy agents likely to cause acute nausea and vomiting, the American Society of Clinical Oncology recommends a three-drug combination. The regimen includes a 5-HT<sub>3</sub> antagonist—Anzemet (dolasetron), Kytril/Sancuso (granisetron), Zofran (ondansetron), or Aloxi (palonosetron)—given before chemotherapy, plus the steroid dexamethasone for one to three days, and the NK-1 receptor antagonist Emend (aprepitant) for three days. These medications work differently and have differing methods of delivery (oral, I.V., or skin patch).

With agents that have a moderate risk of causing nausea and vomiting, evidence suggests the drug combination without Emend is effective; with low-risk agents, only dexamethasone; and for minimal risk, no treatment unless the patient has experienced prior vomiting with therapy.

ASCO recommends patients undergoing total body irradiation receive a 5-HT<sub>3</sub> antagonist before treatment, with or without dexamethasone. With radiation to the abdomen, chest, brain, or back, the organization suggests a similar plan without the steroid.

If the patient cannot tolerate or doesn't respond to the first-choice drugs, the physician may order a different anti-nausea medication, a synthetic cannabinoid such as Marinol (dronabinol) or Cesamet (nabilone), and/or a dopamine receptor antagonist.

For anticipatory nausea and vomiting, the doctor may suggest anti-anxiety medications or nondrug interventions, such as relaxation and distraction, to decrease anxiety. Acupressure, acupuncture, and guided imagery may be used in conjunction with medication. Trials researching the use of herbs, such as ginger, and other natural supplements are under way, but the effectiveness of these products is not established.

**PREVENTION >** Patients can take nonmedical steps to stave off nausea. Self-care techniques include eating a snack prior to chemotherapy or an hour before radiation and bringing food if the treatment will last a long time. Patients may better tolerate small, frequent meals served at room temperature and easy-to-digest items, such as crackers, toast, or flat ginger ale. Patients should wear loose-fitting clothes, and limit exposure to sounds, sights, and smells that trigger nausea.