Ginger for chemotherapy-related nausea in cancer patients: A URCC CCOP randomized, double-blind, placebo-controlled clinical trial of 644 cancer patients

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Nausea is one side effect that almost every person facing cancer therapy fears. It affects their quality of life and ability to work and function. Oncologists have an armamentarium of anti-nausea medications, but many patients still struggle with nausea. Ginger is an herbal medication that has been used for nausea relief for many years. Previous studies have had conflicting results on the effect of ginger on chemotherapy-induced nausea:

- A recent randomized, double-blind, placebo-controlled trial published by Zick et. al. in 2008 from the U. of Michigan suggests that ginger given after the start of chemotherapy along with a 5-HT3 receptor antagonist and/or aprepitant did NOT improve nausea.
- A study by Pace et al. performed in 1986 showed that the use of ginger did reduce the severity of chemotherapy-related nausea in patients with gynecologic cancers. Another recent study performed by Levine et. al. in 2008 showed that high protein meals with ginger reduced the delayed nausea of chemotherapy and reduced use of antiemetic medications in 28 patients.

This study's primary objective was to determine whether ginger is more effective than placebo in controlling chemotherapy-induced nausea when added to a 5-HT3 receptor antagonist + dexamethasone (anti-nausea medications) on day 1 of chemotherapy. The secondary objective was to determine the most effective dose of ginger.

Participants took ginger capsules (or placebo) twice a day, for 6 days, starting 3 days before their chemotherapy dose. The doses were 0.5 grams, 1 g or 1.5 g. Nausea was assessed at baseline and for the 2 following chemotherapy cycles. Patients reported the severity of nausea during the morning, afternoon, evening, and night daily on a 7-point semantic rating scale ('1' = 'Not at all Nauseated' and '7' = "Extremely Nauseated") for Days 1-4 of each cycle.

The researchers found that all of the doses led to significantly reduced nausea when compared to placebo. However, the ginger did not have any effect on vomiting. Ginger appears to be a safe, inexpensive agent that can be used to decrease nausea. (Ginger can increase bleeding risk if taken with Coumadin). Further research is needed to determine what formulations of ginger will be most effective, what length of ginger therapy is best, and if ginger supplementation affects cancer therapies.

Also see Interpreting a Cancer Research Study

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