HEM/ONC News

By Devon Schuyler

Users of Dietary Supplements More Likely to Skip Chemotherapy for Breast Cancer

Women with breast cancer are more likely to skip chemotherapy if they take dietary supplements or use multiple types of complementary and alternative medicine (CAM), according to a new study. The use of mind-body practices was not associated with chemotherapy initiation.

For the BQUAL (Breast Cancer Quality of Care) study, which was published online by *JAMA Oncology* on May 12, Dr Heather Greenlee and colleagues prospectively followed a group of 685 women younger than 70 years who had nonmetastatic invasive breast cancer. Of these, chemotherapy was clearly indicated in 306 patients (45%) and considered discretionary in 379 patients (55%). A survey conducted at baseline revealed that 87% of the participants used at least 1 of 5 types of CAM, including dietary supplements and mind-body therapies. Dietary supplements included vitamins, minerals, herbs, and botanicals but not multivitamins, which were considered mainstream. Mind-body therapies included yoga, meditation, qi gong, acupuncture, and massage.

Up to 12 months after enrolling in the study, chemotherapy had been initiated in 89% of the women in whom it was clearly indicated and 36% of those in whom it was considered discretionary. After adjusting for demographic and clinical characteristics, the researchers found that patients were less likely to initiate chemotherapy if they used dietary supplements (odds ratio [OR], 0.16) or multiple CAM modalities (OR per each additional modality, 0.64) at baseline. By contrast, the use of mind-body practices was not associated with initiation of chemotherapy. In a counterintuitive finding, no association was found between CAM use and the initiation of chemotherapy among women in whom chemotherapy was considered discretionary.

The researchers concluded that CAM use, especially use of dietary supplements, might be a "marker of patients at risk of not initiating clinically indicated chemotherapy."

Lenvatinib/Everolimus Approved for Use in Advanced Kidney Cancer After Antiangiogenic Therapy

The US Food and Drug Administration approved the use of lenvatinib (Lenvima, Eisai) in combination with everolimus (Afinitor, Novartis) on May 13 for patients with advanced renal cell carcinoma (RCC) who have received prior treatment with an antiangiogenic agent. Lenvatinib is a tyrosine kinase inhibitor, and everolimus is an inhibitor of the mammalian target of rapamycin (mTOR).

Approval was based on the results of a phase 2 study by Dr Robert Motzer and colleagues that was published in the *Lancet Oncology* in November 2015. In this study, 153 patients with unresectable advanced or metastatic RCC who had been treated with an antiangiogenic agent were randomly assigned to lenvatinib alone, everolimus alone, or a combination of the two.

Median progression-free survival was significantly higher in patients treated with the combination (14.6 months) or lenvatinib alone (7.4 months) than with everolimus alone (5.5 months). In addition, median overall survival was significantly higher in those treated with the combination (25.5 months) than in those who received everolimus alone (15.4 months).

Grade 3 and 4 adverse events were more frequent in patients taking the combination (71%) or lenvatinib alone (79%) than in those taking everolimus alone (50%). The most common adverse reactions in patients taking lenvatinib/everolimus were diarrhea, fatigue, arthralgia/myalgia, decreased appetite, vomiting, and nausea.

Study Does Not Support Cutting Alteplase Dose in Acute Ischemic Stroke

Intravenous alteplase is an effective treatment for acute ischemic stroke, but it increases the risk for intracerebral hemorrhage. Now, a study finds that cutting the dose of alteplase reduces the risk for intracerebral hemorrhage but may be less effective at preventing death and disability.

The study, which was published in the *New England Journal of Medicine* on May 10, included 3310 patients who were eligible for thrombolytic therapy. The patients' median age was 67 years, and 63% were Asian. Dr Craig Anderson and colleagues randomly assigned the patients to either low-dose alteplase (0.6 mg/kg) or standard-dose alteplase (0.9 mg/kg).

The rate of death and disability at 90 days was 53.2% in the low-dose group and 51.1% in the standard-dose group (OR, 1.09; 95% CI, 0.95-1.25), which failed to establish low-dose alteplase as noninferior to standard-dose alteplase. Major symptomatic intracerebral hemorrhage occurred in 1.0% of patients in the low-dose group and 2.1% of the patients in the standard-dose group (P=.01). Mortality at 90 days was not significantly different between the 2 groups (8.5% and 10.3%, respectively; P=.07)

"There is a trade-off with the lower dose of alteplase in regards to recovery of functioning," said Dr Anderson in an interview. "But being alive from reduced risk of major intracerebral haemorrhage is surely preferable to most patients than suffering an early death."