**A YOGA PROGRAM FOR BREAST CANCER PATIENTS UNDERGOING CHEMOTHERAPY: EFFECTS ON QUALITY OF LIFE AND CHEMOTHERAPY-ASSOCIATED SYMPTOMS**

Tiffany Chen, MD1, Paula Klein, MD2, Tiffany Xing2, Theresa Shao, MD2

1Mount Sinai Beth Israel Hospital; 281 1st Avenue, New York, NY 10003

2Mount Sinai Hospital; 1 Gustave L. Levy Place, New York, NY 10029

**BACKGROUND:** Patients undergoing chemotherapy for breast cancer (BC) report side effects such as fatigue and sleep disturbance that are exacerbated by the stresses associated with the diagnosis and treatment of BC. With yoga as an increasingly popular mind-body practice, we conducted a pilot randomized controlled study to evaluate the feasibility and efficacy of yoga on chemotherapy-related symptoms and quality of life (QOL) in BC patients receiving neoadjuvantand adjuvant chemotherapy.

**METHODS:** Women with stage I-III BC scheduled to receive or within 2 weeks of receiving intravenous chemotherapy at Mount Sinai Cancer Center were randomized to start yoga immediately or in 3 months (waitlist control group). The intervention consisted of 12 weekly 60-minute yoga classes. Participants completed self-reported questionnaires on QOL, anxiety and depression, and sleep quality at the start, 6 weeks, and 12 weeks after randomization. Chemotherapy regimens were recorded. Patients included in data analysis had to have completed questionnaires during at least two time points, including at baseline and at 12 weeks. Two-sample t-tests were conducted comparing survey results.

**RESULTS:** Among the 50 patients, median age at diagnosis was 51 years old. The patient population included 36% African Americans, 20% Hispanics, 20% Asians, 20% white, and 2 patients of unknown race. Average class participation rate amongst the yoga group was 55%. Chemotherapy regimens were similar between the two groups, and both groups had similar chemotherapy completion rates. There was a significant reduction in reported nausea (p=0.014) and significant increase in energy levels (p=0.019) between the yoga and control groups at 12 weeks. In patients that started with reportedly poorer quality of life, there was significant improvement in depression severity (p = 0.050) between baseline and 6 weeks. Patients who attended at least two yoga sessions demonstrated a significant improvement in sleep efficiency between baseline and 12 weeks (p = 0.050).

**CONCLUSIONS:** Weekly yoga participation is feasible in BC patients receiving chemotherapy. Yoga intervention led to significant improvements in nausea, sleep efficiency, energy levels, and depression severity. Larger studies are warranted to further assess the efficacy of yoga in reducing chemotherapy-associated symptoms in these patients.

**Content Categories:** Patient Care

**Key Words:** *Breast Cancer, Yoga, Chemotherapy, Quality of Life, Feasibility*