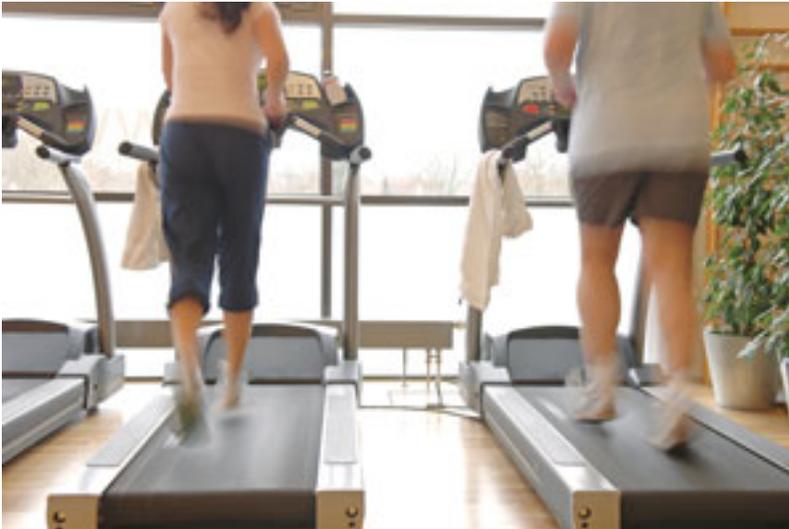


Moderate Exercise During Chemotherapy May Reduce Chemobrain

Laura Martin [@OncEditorLaura](#)

Friday, June 5, 2015



Early-stage cancer patients who are physically active throughout chemotherapy have a reduced risk of experiencing cognitive impairment known as “chemobrain,” and are less likely to have chronic inflammation, according to a University of Rochester (UR) Medical Center study presented June 1 at the 2015 ASCO Annual Meeting. When undergoing chemotherapy, many patients reduce their physical activity. However, this study suggests this is not necessarily the best approach to take, said Karen M. Mustian, PhD, MPH, an associate professor in the UR Departments of Surgery and Radiation Oncology, Cancer Control Clinical Research Unit and a Wilmot Cancer Institute researcher. “Sometimes patients are encouraged to take it easy throughout their treatments. It’s often accepted that their physical activity will just naturally decline,” said Mustian. “But our study demonstrates that we need to strongly encourage them to maintain or increase their activity compared to what they were doing at the beginning of chemotherapy.” The randomized,

multisite, phase III study accrued 479 patients with early-stage cancer who were beginning chemotherapy. The majority (84%) had breast cancer, and the mean age was 54 years. Half of the patients pursued no set exercise regimen during chemotherapy, and the other half were instructed to follow a specific home-based, personalized prescription of aerobic walking and anaerobic resistance band training known as EXCAP (Exercise for Cancer Patients). All patients wore a pedometer to track their daily steps. Cognitive impairment and inflammation were assessed at baseline and post intervention using the FACT-Cognitive Function questionnaire and standard serum Luminex assays, the researchers noted in their abstract. At the start of cancer treatment, most study participants were naturally walking about 4000 steps a day, roughly the equivalent of two miles, which is considered sedentary. By the end of 6 weeks, those who were not on the EXCAP plan had decreased their walking to an average of about 3800 steps per day. Those following the EXCAP plan upped their average steps to 5000 per day, which is considered a low-activity level. The EXCAP group also performed resistance band training 5 days a week for 10 minutes at a low to moderate intensity. The control group did not do any strength training. Those in the EXCAP group reported less brain foginess and memory problems, and had lower levels of blood inflammation. They also had improved mobility compared with the non-exercise group. Exercisers who received chemotherapy in 2-week cycles reported the greatest physiological and psychological benefits from the EXCAP prescription. The benefits shown in this study are very promising for early-stage cancer patients undergoing chemotherapy, said Mustian: “To think that a very simple, low-cost, self-directed exercise prescription can create an anti-inflammatory response similar to a drug and protect against cognitive decline in people with cancer is innovative and very exciting.”