

Exercise Improves Chemo Brain

Patients reported fewer problems with thinking, memory and mental fatigue.

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Patients who followed a structured exercise regimen while receiving chemotherapy reported fewer problems with thinking, memory and mental fatigue, according to a recent study.

In a nationwide Phase III trial, Karen Mustian, PhD, MPH, of the University of Rochester Wilmot Cancer Institute, and colleagues evaluated a program dubbed Exercise for Cancer Patients, or EXCAP, which involves individually tailored walking at moderate intensity and simple resistance band exercises done every day. The study enrolled 687 people with various types of nonmetastatic cancer who were starting chemotherapy for the first time. They were randomly assigned to EXCAP or usual care.

Among people receiving two-week chemotherapy cycles, the EXCAP group had significantly less overall cognitive decline, perceived cognitive impairment and mental fatigue. In contrast, people in the usual care group reported increased cognitive and memory problems. What's more, EXCAP participants were able to maintain daily walking throughout chemotherapy, while those who received usual care reduced their walking by half. However, these effects were not as evident for patients receiving chemotherapy in three- or four-week cycles.

In a follow-up study, the researchers evaluated EXCAP and low-dose ibuprofen, an anti-inflammatory over-the-counter pain medication. This Phase II trial enrolled 86 patients undergoing chemotherapy who reported cognitive problems.

The groups that received ibuprofen without exercise or EXCAP plus a placebo both showed improvements in attention and visual processing. But those assigned to both EXCAP and ibuprofen demonstrated the greatest improvement.

Maintaining the ability to think clearly during treatment “is essential to preserving independence...and sustaining overall quality of life,” says Lindsay Peterson, MD, of Washington University School of Medicine.

