

Eli's Rehab Report

CLINICAL REHAB ROUNDUP: Exercise Offers Leukemia Patients Multiple Perks

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The effects of an exercise program in leukemia patients. Battaglini CL, Hackney AC, Garcia R, Groff D, Evans E, Shea T. *Integr Cancer Ther.* 2009 Jun;8(2):130-8. The medical industry has found yet another opportunity to "prescribe" exercise - an excellent opportunity for physical and occupational therapists to step in. A new study from the University of North Carolina at Chapel Hill suggests that leukemia patients can alleviate the chronic fatigue they experience with more physical activity, according to a news release from the UNC Lineberger Comprehensive Cancer Center. The added exercise can also help kick depression and increase cardiovascular endurance, researchers said.

The study: The Cancer Center teamed up with the UNC Exercise and Sport Science Department to track 10 patients receiving treatment for leukemia. Researchers administered individualized exercise sessions for three to five weeks while the patients were in the hospital for the induction phase of leukemia treatment. Patients underwent aerobic and resistance exercises, core exercises, and light stretches tailored to their fitness level and leukemia symptoms. (The patients used "specially-treated exercise equipment to minimize the risk of infection," UNC pointed out.) Finally, upon their discharge from the hospital, each patient received an aerobic-based exercise prescription to use during their two-week home recovery period.

Before and after the exercise program, the researchers took key physiological measurements including resting heart rate, blood pressure and hemoglobin, body weight/height, body composition, cardiorespiratory fitness, and muscular endurance, according to the press release. They also tested psychological measures using standard scales for assessing fatigue, depression, and quality of life in cancer patients.

Findings: "We found that patients experienced significant reduction in total fatigue and depression scores, as well as improved cardiorespiratory endurance and maintenance of muscular endurance," said **Claudio Battaglini, PhD**, assistant professor of exercise and sport science at UNC.

Meanwhile, researchers plan to conduct a follow-up study, a randomized clinical-controlled trial, to assess the effects on an individualized exercise prescription in patients with acute leukemia versus a group of patients with leukemia receiving the usual treatment, UNC said.