

Review

The effect of exercise on fatigue and physical functioning in breast cancer patients during and after treatment and at 6 months follow-up:

A meta-analysis

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ABSTRACT

Breast cancer is the leading cause of cancer in women worldwide. Exercise interventions may improve physical and psychological factors during and after active breast cancer treatment. The aim of this systematic review was to assess the current knowledge regarding the efficacy of physical exercise with respect to fatigue and self-reported physical functioning. Systematic searches in Cochrane Library, Medline, Embase, Cinahl, PsycINFO, AMED and PEDro. After assessing the quality of the studies, we identified 25 randomized controlled trials that included 3418 breast cancer patients. An increase in physical functioning and a decrease in fatigue were observed after a physical exercise intervention, with an SMD of 0.27 (0.12, 0.41) and 0.32 (0.49, - 0.14), respectively. There were slightly higher improvements in physical functioning and fatigue when the patients received the intervention after adjuvant breast cancer treatment. The 6-month follow-up data showed a small favourable difference for the physical exercise group for both physical functioning and fatigue. This systematic review found that an exercise intervention program can produce short-term improvements in physical functioning and can reduce fatigue in breast cancer patients. However, more studies are needed to confirm the timedependent observations in this study.

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