



Psychosomatic

Physical activity before surgery for cancer

Does exercise lead to improvements in pain prior to invasive surgery?

Author : Jessica Povall

Pain and poor quality of life are some of the most common factors associated with cancer, no matter what stage of treatment the patient is in.

While exercise is often examined as a beneficial factor for preventing cancer, and improving level of functioning, can it be used to treat pain even while the patient is undergoing multiple treatments?

While evidence exists for the correlation between exercise and pain reduction in persistent populations, the authors of this article have chosen to examine whether exercise can have any impact post-chemoradiation, and pre-surgical resection for patients with rectal cancer.

A non-randomized controlled pilot trial was conducted, with patients engaging in an exercise programme following chemoradiation, but prior to undergoing surgical resection.

As an outcome measure, controls and participants completed the European Organization for Research and Treatment of Cancer core Quality of Life questionnaire and the RAND 36-Item Health Survey 3 times: pre-neoadjuvant chemoradiation therapy, post-neoadjuvant chemoradiation therapy/ pre-exercise intervention, and post-exercise intervention.



The programme ran for 6 weeks and the exercise intervention - comprised of interval aerobic training - was delivered in a hospital setting.

Following the treatment, it was found that the greatest increases in the exercise group were in self-reported pain, fatigue, insomnia, and health perceptions. This study was one of the first preliminary studies to find that exercise, even during times of heavy treatment (post-chemoradiation and pre-surgical) can provide beneficial changes in pain and additional quality of life standards for those with cancer pain.

Pain and cancer-related fatigue are the 2 most common issues surrounding cancer treatment. So in the middle of what is often a very heavy pharmacological treatment, it is good to see that something as simple as exercise can provide some reduction in pain.

It is well understood that exercise can help alleviate pain, both through endorphins, improved circulation, improved sleep, and further interventions with fatigue. But this article is one of many that show that exercise has a powerful effect on pain - even during physically very taxing times such as during cancer treatment.

> From: Brunet et al., *BMC Cancer* 17 (2017) 153 (Epub ahead of print). All rights reserved to The Author(s). [Click here for the online summary.](#)



Sign up on our website and get access to the latest evidence based articles reviewed and explained by our experts.

Visit www.anatomy-physiotherapy.com

Anatomy & Physiotherapy works with international renown experts and writers to provide a current and evidence-based content service to students, physiotherapist, musculoskeletal health professionals and educational institutes around the world in 5 key thematic areas and 7 different languages.

The best summaries to help you to improve your care. Easy and accessible.



Musculoskeletal



Aging & Chronic
Diseases



Women's Health



Lifestyle &
Prevention



Psychosomatic