

Physical activity benefits lung cancer patients and survivors

April 2 2015

Exercise and physical activity should be considered as therapeutic options for lung cancer as they have been shown to reduce symptoms, increase exercise tolerance, improve quality of life, and potentially reduce length of hospital stay and complications following surgery for lung cancer.

Lung cancer is the leading cause of cancer deaths in the United States with an estimated 160,000 deaths each year and worldwide there are 1.4 million deaths. In the last two decades lung cancer therapy has improved, but the overall 5-year survival rate is still quite low at 17%. Lung cancer patients experience many debilitating symptoms including difficulty breathing, cough, fatigue, anxiety, depression, insomnia, and pain. A third of long term survivors, those >5 years from diagnosis, experience reduced quality of life and report lower physical and health scores compared to healthy patients. Given the incidence of lung cancer and the associated costs An inexpensive and relatively easy cancer therapy to reduce symptoms and improve quality of life, like physical activity, could be beneficial, especially for therapy, but clinicians underutilize exercise as a therapy, in part due to the lack of evidence-based consensus as to how and when to implement increasing physical activity.

Dr. Gerard A. Silvestri, Dr. Brett Bade, and colleagues at Medical University of South Carolina have reviewed the safety, benefits, and application of increasing physical activity and exercise in lung cancer with the goal to summarize the effect on improved lung cancer outcomes. Their results are published in the *Journal of Thoracic*



Oncology, the official journal of the International Association for the Study of Lung Cancer (IASLC).

The authors found that most lung cancer patients (regardless of stage) want physical activity advice directly from a physician at a cancer center before cancer treatment and exercise guidance may increase compliance with a dedicated program.

Physical activity reduces risk of cancer development in multiple cancer types including lung. Large trials showed exercise's association with reduced all-cause mortality and that self-reported moderately vigorous physical activity led to lower risk of all-cause and cancer-specific mortality. Multiple trials have shown that increased activity reduces symptom burden and that exercise interventions may have beneficial effects on quality of life, physical function, social function, and fatigue.

Perioperative exercise in lung cancer patients appears to be safe with improvement in operability, operative risk, post-operative complications, as well as increase exercise capacity. Preoperative interventions may be more beneficial than post. Non-surgical advanced-stage lung cancer patients may benefit from increased physical activity by improving exercise tolerance and symptom burden, though the location, duration, and intensity to be recommended is not clear.

Chronically-ill cancer patients have different exercise limitations than their healthy counterparts and other concurrent diseases and high symptom burden add challenges in how best to study and implement physical activity programs in lung cancer patients. Low-intensity regimens such as daily walking or step-counting may provide a safe mechanism to increase physical activity while identifying an individual patient's activity limits. Both supervised and self-directed programs have potential benefit, though how to choose one versus the other is not yet clear.



The same benefits of increased activity observed in lung cancer patients, especially improved symptoms and quality of life, appear to apply to lung cancer survivors as well.

The authors conclude "clinicians should (at minimum) consider physical activity early, counsel against inactivity, and encourage physical activity in all stages of lung cancer patients and lung cancer survivors. This review shows uniform recognition that exercise and physical activity are safe for those with lung cancer, patients are requesting increased activity counseling, and multiple studies and reviews show potential clinical benefit in quality of life, exercise tolerance, and post-operative complications. Further, we know that inactivity in cancer patients is associated with worse outcomes." However, "there are still large gaps in the published literature to be addressed and these could be filled with large definitive prospective trials that evaluate the benefit of exercise in lung cancer patients".

More information: *Journal of Thoracic Oncology*, journals.lww.com/jto/Abstract/ ... e in Lung.98967.aspx

Provided by International Association for the Study of Lung Cancer

Citation: Physical activity benefits lung cancer patients and survivors (2015, April 2) retrieved 7 May 2024 from https://medicalxpress.com/news/2015-04-physical-benefits-lung-cancer-patients.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.