Medical Xpress

Exercise after surgery is important for lung cancer surgery recovery

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Combining aerobic and resistance training may offer the most benefits for women during and after chemotherapy for breast cancer, according to a new U of A study. The research also showed that women who included resistance training in their workouts were more likely to stick with regular exercise after their cancer treatment.. Credit: CC0 Public Domain

Lung cancer patients who exercised after the surgery to remove their tumour experienced better fitness levels and strength in their leg muscles as well as less shortness of breath compared to those who did not, new research led by Curtin University has found.

The research, published in the Cochrane Database of Systemic Reviews, examined whether exercise training was beneficial for people diagnosed with non-small cell lung cancer (NSCLC) and who had a lung resection, a surgical procedure that removes the tumour as well as parts of the lung, in the past 12 months.

Lead author Dr. Vinicius Cavalheri, a Cancer Council WA Postdoctoral Fellow and Senior Lecturer from the School of Physiotherapy and Exercise Science at Curtin University, said lung cancer continued to be a growing problem around the world, with NSCLC accounting for more than 85 percent of all cases globally.

"The survival rate for NSCLC is considerably better than small cell lung cancer, with an estimated 40 percent of people who undergo the lung resection surgery of the primary tumour likely to survive more than five years," Dr. Cavalheri said.

"In this systematic review, the results of studies that included participants who took part in exercise training such as aerobic exercise, resistance exercise, or a combination of both, within 12 months of the surgery were pooled together. We examined whether health outcomes such as fitness level, quality of life, muscle strength and symptoms of shortness of breath and fatigue could be improved through this type of training.

"The review found that people with NSCLC who exercise after lung surgery have better fitness levels and strength in their leg muscles, compared to those who did not. We also found that they experienced a

better quality of life and less shortness of breath following exercise."

The research could not explain whether exercise training after lung surgery had any impact on grip strength, fatigue and lung function. There was also insufficient evidence to determine whether it also improved the strength of breathing muscles or feelings of anxiety and depression.

Dr. Cavalheri explained that previous research had found that more than 80 percent of people who had this type of surgery to treat lung cancer failed to engage in physical activity in the six months following their treatment.

"After lung surgery for NSCLC, people's fitness levels and quality of life decrease and they may also experience symptoms of weight loss, anorexia, anaemia and muscle wasting," Dr. Cavalheri said.

"Our findings have important implications for people who are recovering from a lung resection, highlighting that exercise training has important benefits for people who have had this type of surgery. Referrals to exercise programs following surgery should be considered to improve the fitness and quality of life of patients with lung cancer."

More information: Exercise training after lung surgery for people with non-small cell lung cancer. www.cochrane.org/CD009955/LUNG … all-cell-lung-cancer

Provided by Curtin University

cancer-recovery.html