

Helium helps lung patients breathe easier

9 March 2009

New research published in the international journal Alberta Health Services Chronic Disease Chest, by Neil Eves, PhD, finds that people with chronic obstructive pulmonary disease (COPD) who breathed a mix of 60% helium and 40% oxygen during a rehabilitation program were able to exercise longer and harder than those who breathed normal air.

This innovative therapy is significant because research has shown that patients who perform more exercise and get greater improvements in fitness also get better improvements in their symptoms and health-related quality of life.

"COPD is not curable," says Eves, a researcher with the Faculties of Kinesiology and Medicine. "Our hope is that this research will help more individuals with COPD to realize the benefits of exercise."

Eves says he chose this specific gas mixture, because helium is a less dense gas that allows patients suffering with COPD to empty their damaged lungs better, while oxygen slows their breathing and further helps to reduce the shortness of breath these patients commonly suffer from. Standard air is generally made up of 78% Nitrogen and 21% Oxygen with just a trace of Helium.

In the study, individuals with COPD breathed either the helium/oxygen mix or air during cycling exercise. While both groups improved their tolerance for exercise over a six-week rehabilitation program, the group that trained with helium could exercise significantly longer following rehabilitation than the control group.

Chronic obstructive pulmonary disease is the fourth leading cause of death in Canada. It currently kills more women than breast cancer and health experts project that the disease will become more prevalent as the population ages.

Interestingly, Eves' innovative research protocol is already being used in a clinical application by

Management Program.

"We are always interested in innovations that can help to improve the effectiveness of our health interventions," says Dr. Sandra Delon, PhD, the director of Alberta Health Services' Chronic Disease Management Program. "We've already seen some promising results in this pilot program, so we're very encouraged."

Source: University of Calgary



APA citation: Helium helps lung patients breathe easier (2009, March 9) retrieved 28 April 2021 from https://medicalxpress.com/news/2009-03-helium-lung-patients-easier.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.