

Research Snapshot

CARDIO-RESPIRATORY HEALTH | DR. GAIL DECHMAN

Recovery of the ability to perform activities of daily living (ADL) following an acute exacerbation of COPD

We are describing functional recovery following an acute exacerbation of COPD using the Physical Functional Performance-10 test (PFP-10), which is a quantitative objective measure of activities of daily living. We assess patients' strength, quality of life, ability to perform activities of daily living and inflammatory biomarkers within 48 hours of discharge from hospital for an acute exacerbation of their disease, and at 1 and 2 months post-discharge. Following discharge we also assess daily physical activity. The PFP-10 assesses 5 domains: upper body strength, lower body strength, balance and coordination, endurance, and flexibility and therefore is able to identify the cause of impaired function. It is sensitive also to change in this patient population. We expect this research to help us understand the course of recovery following an exacerbation of COPD and to develop more effective rehabilitation programs for this group of individuals.

Funding Sources: Lung Association of Nova Scotia

Collaborators: P. Hernandez (Respirologist, QEII Hospital),
E. Cowley (Physiology and Biophysics, Dalhousie University)

Physiologic and psychosocial effects of aerobic and resistance exercise in men undergoing androgen deprivation therapy for prostate cancer

Men who receive androgen deprivation therapy (ADT) for prostate cancer are at increased risk for developing several adverse effects that can be detrimental to both their physical and mental health. Common adverse effects included weight gain, muscle wasting, cardiovascular morbidity, fatigue and impaired quality of life (QOL). This prospective, randomized controlled trial assessed whether a combined aerobic and resistance exercise program could alleviate some of these symptoms in men receiving ADT. Fifteen men aged 55-80 years who were receiving ADT were recruited to the study and were assigned to a usual care group or an exercise intervention group. Men in the exercise group completed a 16-week combined aerobic and resistance exercise program. Outcome measures included: cardiorespiratory fitness; muscle strength and endurance; body composition; and reports of QOL, fatigue, mood, partner relations and exercise behaviour. Thirteen men completed the study, 6 in the exercise group. The exercise program did not lead to changes in weight, BMI or body fat. Large effect sizes were noted in muscle mass, and muscular and cardiorespiratory fitness in the exercise group. Unexpectedly, QOL declined for both groups during the intervention. Fatigue, mood, anxiety and depression did not change over the course of the intervention. Partners of the men in the exercise group reported improved partner relationships.

Funding Sources: Nova Scotia Health Research Foundation

Collaborators: R. Wassersug (Department of Anatomy and Neurobiology, Dalhousie University)
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