A Pilot Randomized, Controlled Trial of a Wall Climbing Intervention for Gynecologic Cancer Survivors

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Purpose/Objectives: To examine the feasibility and preliminary efficacy of an eight-week supervised climbing intervention for gynecologic cancer survivors (GCSs).

Design: A pilot randomized, controlled trial.

Setting: The Wilson Climbing Center in Edmonton, Alberta, Canada.

Sample: 35 GCSs who had completed cancer therapy.

Methods: GCSs were randomized to an eight-week (16 session) supervised wall climbing intervention (WCI) (n = 24) or usual care (UC) (n = 11).

Main Research Variables: Feasibility outcomes included recruitment rate, adherence rate, skill performance, and safety. Preliminary efficacy outcomes were objective health-related and functional fitness assessed before and after the eight-week intervention using the Senior Fitness Test.

Findings: Median adherence to the WCI was 13.5 of 16 sessions. Most GCSs were proficient on 16 of 24 skill assessment items. No serious adverse events were reported. Based on intention-to-treat analyses, the WCI group was superior to the UC group for the 6-minute walk, 30-second chair stand, 30-second arm curls, sit and reach, 8-foot up-and-go, grip strength-right, and grip strength-left assessments.

Conclusions: The Gynecologic Cancer Survivors Wall Climbing for Total Health (GROWTH) Trial demonstrated that an eight-week supervised WCI was safe, feasible, and improved functional fitness in GCSs. Phase II and III trials are warranted to further establish the safety, feasibility, and efficacy of WCIs in cancer survivors.

Implications for Nursing: Oncology nurses may consider a climbing wall as an alternative type of physical activity for improving functional fitness in GCSs.

Gynecologic cancers are the fourth most common cancer in women, with about 100,000 new cases diagnosed per year and more than 1 million survivors in the United States (American Cancer Society, 2016). Gynecologic cancer survivors (GCSs) experience negative physical and psychological side effects following diagnosis and treatment, such as psychological distress, fatigue, menopausal symptoms, sexual dysfunction, pain, cognitive dysfunction, and sleep disturbances (Grover et al., 2012; Salani, 2013). In addition, GCSs have lower physical fitness than matched controls based on a cross-sectional comparison (Peel et al., 2015). Systematic reviews and meta-analyses have confirmed the importance of physical activity for the physical and psychological health benefits of cancer survivors (Courneya & Friedenreich, 2007; Fong et al., 2012; Mishra et al., 2012), but few studies have focused on GCSs (Peel et al., 2015).

Similar to physical activity interventions in other cancer survivors, most physical activity interventions in GCSs have focused on walking (Peel et al.,