

PLAN FOR THE FUTURE: IMPROVING OUTCOMES VIA PREHABILITATION FOR A PATIENT UNDERGOING HYPERTHERMIC INTRAPERITONEAL CHEMOTHERAPY (HIPEC) AND CYTOREDUCTIVE SURGERY (CRS)

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Introduction

Prehabilitation is a process where individuals are screened for existing co-morbidities and an exercise plan is developed to maximize pre-surgical function to optimize post-surgical outcomes. Prehabilitation (Prehab) is slowly gaining traction, but remains vastly underutilized, for patients with cancer. Patients undergoing a HIPEC procedure with concurrent CRS may already be deconditioned from prior chemotherapy and surgeries, thus negatively impacting their ability to recover post-operatively.

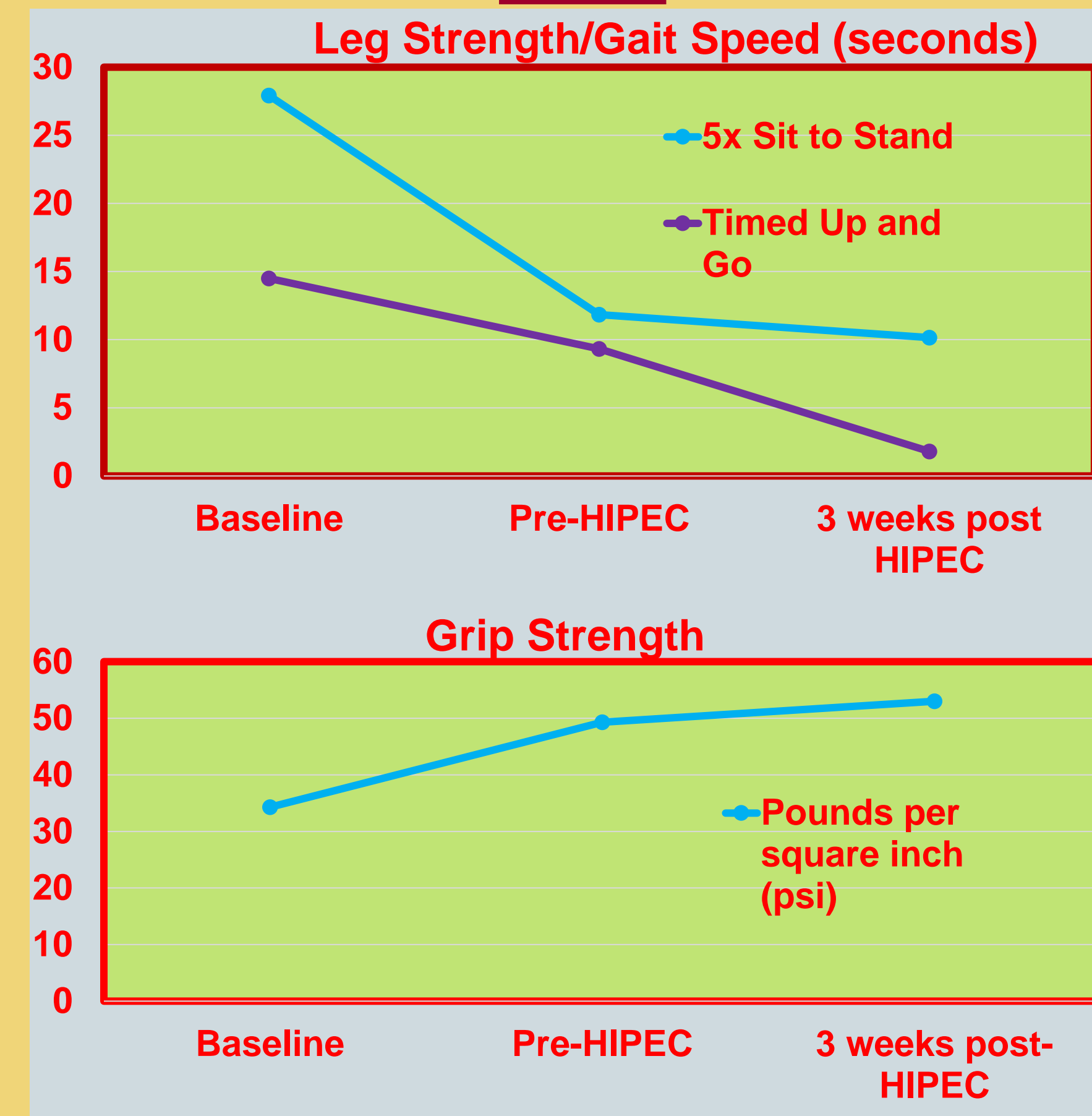
Methods

A patient with appendiceal carcinoma with metastatic peritoneal disease was evaluated by physical therapy in the spring of 2023. The patient had previously been active, including going to a community gym. However, after his diagnosis in 2018 he endured multiple rounds of chemotherapy and became increasingly deconditioned, requiring the use of a rolling walker for assistance. His Five Time Sit to Stand time put the patient at an increased risk of falling. Prehab was initiated and an individualized rehabilitation plan implemented. He was seen for five visits over two months in preparation for HIPEC surgery. He returned to physical therapy one-week post-op and re-evaluated three weeks post-op. PT continued to follow the patient as he underwent a second HIPEC with concurrent CRS in the fall of 2023 and was seen for an additional ten visits. He was eventually discharged from PT to his community gym in March 2024.

Prehabilitation is a vital component of the cancer care continuum, and should be integrated into patient care to maximize pre-surgical post-surgical outcomes.

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Results



Discussion

Following initial Prehab, the patient had significantly improved his overall leg strength as well as his gait speed, was no longer at an increased risk of falls, and no longer required the use of a walker. Three weeks post-HIPEC, he decreased his time in the 5x sit to stand by another one second, further improved his gait speed, and increased his grip strength. These gains demonstrate the overall increase in physical function achieved through prehab and thus it's integral role in the cancer care continuum.