



2021 LEAD Capstone Poster Session

Neoadjuvant Rehabilitation in Gastrointestinal Malignancies: Developing a Multidisciplinary Prehabilitation Program to Improve Post-Surgical Outcomes

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Abstract

- Premorbid functional status prior to cancer and major surgery has been shown to correlate with treatment outcomes
- This modifiable risk factor is often forgotten or not prioritized as a way to improve patient outcomes
- Prehabilitation exercise programs have been shown to decrease morbidity, improve post-operative outcomes and shorten patient recovery after major abdominal surgery
- Goal is develop and implement a prehabilitation program that improves outcomes in patient with gastrointestinal malignancies



Objectives

- Develop a multimodal prehab program for patients with gastrointestinal (GI) malignancies here at UT Southwestern
- Improve outcomes and health related quality of life in patients undergoing surgery for GI malignancy
- Track functional outcome measures to inform future research



Background Information

- GI malignancies are the 2nd most common group of cancers in the US
- Surgical resection remains a mainstay of treatment for GI malignancies but is often associated with
- Premorbid functional status prior to cancer and major abdominal surgery has been shown to correlate with treatment outcomes and is associated with all-cause mortality.
- Feasibility of prehabilitation in patients with GI malignancies has been demonstrated



Specific Aims

- Improve strength, cardiorespiratory fitness and nutritional status in the neoadjuvant setting
- Decrease post-op hospital length of stay
- Decrease post-op morbidity
- Decrease amount of time for functional recovery post-op



Project Plan

- Implement a multimodal prehab program
 - PM&R MD visit to educate patients, identify and manage risk factors and address barriers to implementing home prehab program. Provide specific prescription for prehabilitation.
 - Physical therapy visit to teach proper technique and form for home exercise program focusing on key muscle groups
 - ✦ Generalizable to all patients in neoadjuvant setting
 - Create high quality video content for patients to reference that include proper technique and modifications of exercises within home program
- Obtain baseline and post-operative functional measures in order to study effectiveness of different prehab interventions



Application of What You Learned at LEAD

- Using DISC profile to understand my personality style as well as understand how to adapt to other personality styles
- How to organize and prioritize tasks in level of importance
- How to assess my own inherent biases to ensure I am addressing potential patients barriers and providing equitable care to all patients



Proposed Budget

- 0.2 FTE for physical therapist
- \$10,000 for videographer for creation of high quality digital content



Innovation and Significance

- Few cancer centers nationally have well established relationships between oncologic and rehabilitation providers
- Establishment of a successful clinical prehab program will enhance patient care, drive new research, and build national reputation at UTSW and the Simmons Cancer Center
- This program meets the strategic mission of UT Southwestern to promote interprofessional collaborative practice and foster innovation



References

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