Prehabilitation Model of Care for the Patient with Breast Cancer

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Background
Breast cancer related lymphedema (BCRL) is a progressive, morbid, and incurable disease with an incidence rate of 6-47%. Early detection models have been discussed since 2013, but very few (if any programs) existed at this time. Early detection of BCRL correlates to less physical limitation, joint pain, medical costs, and improved quality of life. Early detection includes a pre-operative assessment to obtain baseline data/measurements, followed by post-operative follow up assessments at frequent intervals. The program at the Stefanie Spielman Comprehensive Breast Center is focused on a comprehensive prehabilitation model that includes a functional assessment, as well as lymphedema surveillance.

Methods
The prehabilitation model of care at The Stefanie Spielman Comprehensive Breast Center was initiated in January 2018. This model includes a comprehensive physical therapy evaluation consisting of:
- Shoulder range of motion assessment
- Posture assessment
- Girth measures via tape measure
- Bioimpedance spectroscopy (SOZO)
- Lymphedema education

The patients are referred from their surgical oncologist prior to surgery. Patients are followed for lymphedema surveillance for the first two years following surgery at set time intervals; every 3 months for the first year, and every 6 months for the second year following surgery.

The main goals of this prehabilitation program are to:
- Detect and treat subclinical lymphedema
- Promote the full return of function
- Proactively identify potential functional side effects of breast cancer treatment such as radiation fibrosis and fatigue

Results
Figure 1 demonstrates an increase in percentage of pre-operative assessments since the implementation of this program in January 2018. In addition, the data demonstrates the opportunity to treat subclinical lymphedema, improving the quality of care delivered to these patients.

Figure 2 depicts the number of patients who demonstrated a delta 6.5 or 10 that received compression. Compression was provided based on clinical assessment, not purely the sozo score.

Conclusions
Early post-surgical physical therapy intervention has been supported in the literature and in clinical practice.

A prehabilitation model of care provides a proactive approach to care for patients with breast cancer.

Future iterations should include more consistent post-operative care, and research trials to follow patients long term after use of early compression.

For references and authors contact information, view the PDF linked to this codes.