

Outpatient Physical Therapy Management of a Breast Cancer Survivor Following Kyphoplasty with a Complex Medical History

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Background and Purpose

- There are over 3 million breast cancer survivors in the U.S.
- Cancer and its treatment can cause a wide variety of long-term physical and psychological problems
- The physical therapist's role is not well defined for this population
- The purpose of this case report is to describe the outpatient physical therapy management for a patient with a history of breast cancer as well as considerable additional health issues

Patient History

- Patient was a 70 year old female who was referred to outpatient physical therapy for generalized weakness following kyphoplasty
- Patient had an extensive medical history, including:

| Diagnosis | Details |
|-----------------------------------|--|
| Metastatic breast cancer | 3 years remission Received chemotherapy, radiation therapy, hormone therapy, surgery |
| Double mastectomy (3.5 years ago) | Had several complications after surgery including inflection, and minor lymphedema in bilateral upper extremities (UE), now resolved |
| Advanced Osteoporosis | Secondary to cancer treatment |
| Compression fractures of spine | T6, T7, T8, T12, L1, L2 |
| Kyphoplasty – 1 year ago | T6, T7, T8, T12, L1, L2 |
| Stroke – 12 years ago | Right (R) hemisphere |
| High blood pressure | Controlled with medication |
| Scoliosis | Right thoracic |
| Stress urinary incontinence | Previously received physical therapy, symptoms were resolved |
| Fibromyalgia | Diagnosed 10 years prior |
| Atrial fibrillations | Monitored by cardiologist |
| Migraines | Does not take medication for migraines |
| Depression | Previous suicide attempt, date unknown |

Kyphoplasty Surgery



<http://actualcures.com/severe-back-pain-medication-compression-fracture-surgery-potassium.html>

- Vertebral compression fractures (left) were surgically expanded
- Space was then filled with orthopedic cement (right)

Examination

- Major findings included: impaired sitting and standing posture, decreased range of motion (ROM) in upper extremities (UE) and trunk, decreased gross strength, decreased endurance, high level of fatigue, and impaired functional mobility

Procedural Interventions

- Patient was seen for a total of 11, 40 minute sessions over the course of 6 weeks
- Each session combined therapeutic exercise, functional training, and manual techniques

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|---|
| Therapeutic Exercise |
| Flexibility Exercises |
| Gait and Locomotion Training |
| Relaxation |
| Strength, Power, and Endurance Training |
| Functional Training in Self-Care and Home Management |
| Activities of Daily Living (ADL) Training |
| Instrumental ADL Training |
| Injury Prevention Education |
| Safety Awareness Training |
| Manual Therapy Techniques |
| Massage |
| Passive Range of Motion |

Outcomes

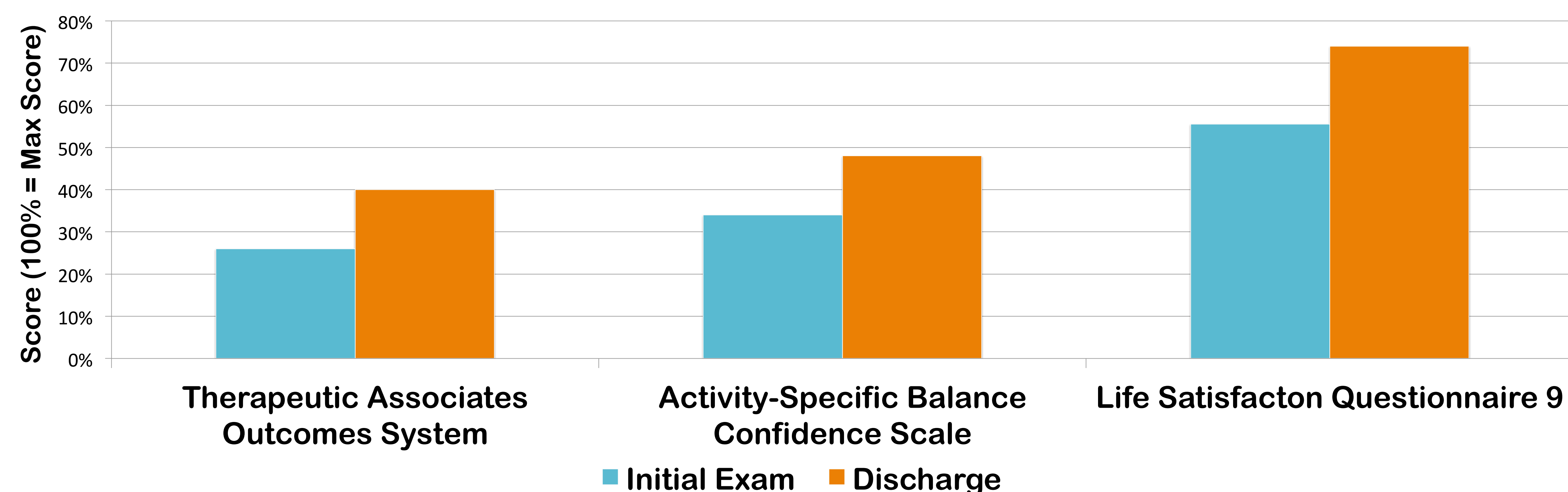
- All outcomes improved from baseline to discharge
- Functional mobility improved as patient no longer used a wheelchair for community ambulation

| Test / Outcome Measure | Baseline | Discharge |
|--|------------|------------|
| Pain Visual Analog Scale (VAS) | 7.4 / 10 | 7.0 / 10 |
| Therapeutic Associates Outcomes System (TAOS) | 26% | 40% |
| Life Satisfaction Questionnaire 9 (LiSAT-9) | 30/54 | 40/54 |
| Five Times Sit to Stand Test (FTSST) | 49 seconds | 19 seconds |
| Fatigue Severity Scale (FSS) | 63/63 | 53/63 |
| Activities-specific Balance Confidence Scale (ABC Scale) | 34% | 48% |

Discussion

- Patient made good progress and able to reach her goals
- Previous studies have demonstrated physical and psychological benefits of physical activity for cancer survivors
- Findings demonstrate the potential of individualized outpatient physical therapy management to improve function and quality of life for cancer survivors with complex medical histories
- Future randomized control trials should focus on the effects of individualized treatment on function and quality of life for this population in the outpatient setting

Changes in Outcome Measures



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