



Moving On with Cancer Rehabilitation

Presented to: Cancer Connections

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Give me back my life!



But how??

Let's start with what cancer rehabilitation is not.

It is not . . .

- New
- Simply “exercise
- Community fitness programming
- Tai Chi
- Quigong
- Personal Training
- Yoga
- Exercise physiology
- A 4 – 12 week diet & exercise program designed to increase cardiac endurance, strength training, & weight loss – *though it can be a part*
- Self-administered by an exercise handout
- 1-size fits all
- Only lymphedema management
- Something recently discovered to be of benefit for people with cancer
- Free

What it is . . .

- Delivered by state licensed & board certified specialists
- Covered by insurance
- Available in inpatient & outpatient settings

Specifically . . .

- **Interdisciplinary** w/ state licensed & board certified
 - Physical Medicine and Rehabilitation physicians
 - **Physical Therapists**
 - Occupational Therapists
 - Speech Therapists
 - Clinical Psychologists, Social Workers, Rehabilitation Nurses, Dieticians, Recreational Therapists
- **Prescribed**
- **Available in inpatient & outpatient settings**
- **Rehabilitates impaired or lost movement & ability to participate in daily life** in a safe, healthy manner consistent with social roles
- **Billed by rehab professionals & covered by health insurance**
- **Determines physical & functional levels of capacity, safety, & recommends discharge status & returns to daily life**
 - *Home, acute inpatient rehabilitation, skilled nursing facility*
 - *Returns people to community, fitness, work, social role, etc*

The Role of Cancer Rehabilitation

Interdisciplinary Approach to Recovering Function & Quality of Life

• What is it? *Primarily . . .*

- *Physiatry – Medical Doctors of Physical Medicine and Rehabilitation*
- **Physical Therapy**
- Occupational Therapy

Majority of Certified Lymphedema Therapists (CLTs)

– Speech Therapy

– Other therapies

- Counseling (Clinical Psychologist, Licensed Clinical Social Worker)

- Recreational Therapy

- Rehabilitation Nursing

In acute inpatient rehabilitation facilities only

Early Rehabilitation - Advantages

- **Significantly improves**

- **Physical & functional ability**

Desmeules et al 2013; Mertes et al 2013; Starks et al 2014; Gooch et al 2012; Niu et al 2011

- **Self-efficacy**

Gooch et al 2012; Niu et al 2011; Lane-Carlson, Kumar 2012

- **Pain management**

Niu NN et al 2011

- **Health-related quality of life**

Gooch K et al 2012; Niu NN et al 2011; Lane-Carlson ML, Kumar J 2012

- **Significantly reduces**

- **Hospital length of stay**

Mertes et al 2013; Husni et al 2010; Barbieri et al 2009; Raphael et al 2011

- **Post-surgical complications**

Husni ME et al 2010

- **Readmission**

Starks et al 2014; Gooch et al 2012; Niu et al 2011; Lane-Carlson, Kumar 2012; Husni et al 2010; Barbieri 2009; Raphael et al 2011; Cross, Berger 2014

This approach is not standard care for oncology patients.

ASK for it.



Cancer-related impairments treated by rehabilitation services

- Pain
- Peripheral neuropathy
- Fatigue
- Muscle weakness
- Range of motion & flexibility
- Abnormal posture
- Movement dysfunction & disorders
- Skin sensation problems
- Balance, coordination
- Difficulty walking
- Deconditioning
- Painful intercourse
- Urinary & fecal incontinence
- Difficulty w/ activities of daily living
 - *dressing, bathing, eating, driving, shopping, meal preparation, housecleaning, multitasking, etc . . .*
- Functional capacity decline
- Memory deficit interfering w/ physical & functional ability
- Vertigo
- Lymphedema & related skin integrity
- Painful intercourse
- Urinary & fecal incontinence
- Speech, swallowing, hearing

What should I expect during my visit with a rehabilitation professional?

- **Patient interview**
- **Observation**
- **Inspection**
 - Skin integrity
 - Palpation
 - Edema
 - Symmetry
 - Postural alignment
- **Tests & measures**
 - Pain & Fatigue
 - Edema & lymphedema
 - Joint range of motion (active & passive), muscle flexibility, joint laxity
 - Muscle strength
 - Neurological elements – *cranial nerves, CNS, PNS, static & dynamic balance, nerve conduction tests, electromyographic testing*
 - Postural alignment
 - Endurance, physical & functional capacity
 - Balance, coordination, gait analysis
 - Basic & instrumental ADLs
 - Speech & swallowing
- **Analysis & Assessment**
- **Rehabilitation Diagnosis & Goals**
- **Plan of Care**
- **We treat:**
 - Impaired movement disorders from any cause
 - Musculoskeletal, neurological, cardiovascular, cardiopulmonary, integumentary, etc impairments from any cause
 - Pain & fatigue
 - Lymphedema

Case Example

Breast cancer survivor with failed reconstructions & severe pain

- L sided mastectomy w/ 5 axillary lymph nodes removed – *5 years ago*
- Severe post-mastectomy pain (8 – 10/10 daily)
- Regular pain med + breakthrough
- Severe muscle guarding
- Lots of scarring
- Other than BCA, no other health issues **EXCEPT**
- Total inability to use L arm & shoulder
- ***Total inability to use L arm & shoulder with pain so severe - now considering amputation of L arm***

PT Evaluation

• Pt. Interview & History

- Subjective complaints of
 - Pain (6/10 – 10/10)
 - Fatigue (4/10)
 - UE heaviness, swelling comes & goes
- Bookkeeper for family business
- Former Texas State Fair Barrel Racing Champion
- Lives on 120 acre ranch w/ 5 horses
 - *Hasn't ridden or tended in 5 years*

• Observation & Skin Inspection

- Lots of scarring; abnormal skin sensation; no skin discoloration, texture changes, edema



• Tests & Measures

- 30% shoulder range of motion
- Poor muscle strength
- Abnormal posture
- Unable to tolerate skin sensation testing & palpation

Physical Therapy Diagnosis & Problem List

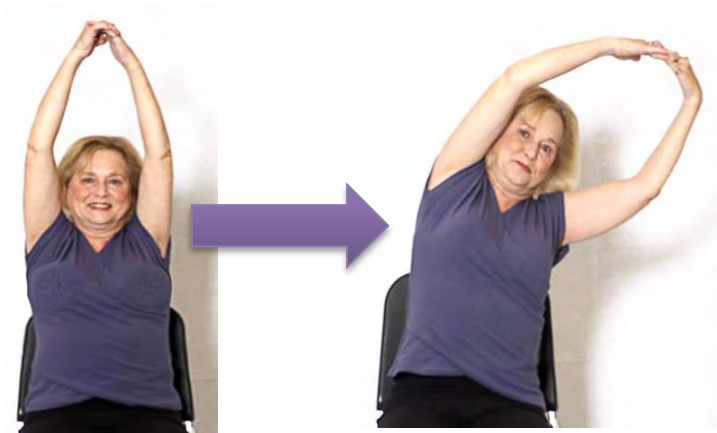
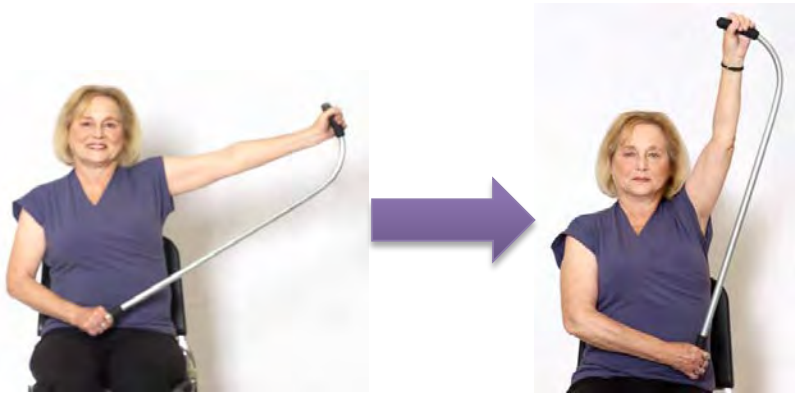
- Post-mastectomy pain syndrome
- Impaired movement ability, flexibility, strength, pain, abnormal posture
- Impaired activities of daily living & poor quality of life
- Patient Goals
 - *Short-term goals (2-4 weeks)*
 1. Reduce pain by 20% in order to comfortably perform activities at desk heights
 2. Improve muscle strength by ½ muscle grade so that patient can perform activities at desk heights
 3. Improve shoulder range of motion by 15% in at least 2 planes of movement so that patient can perform activities at desk heights
 - *Long-term goals (6-8 weeks)*
 1. Reduce pain so that patient may comfortably perform all activities
 2. Improve muscle strength so that patient can ride & care for a horse independently
 3. Improve UE range of motion so that patient can ride & care for a horse independently

What did we do?

- **PT sessions 2 x weekly w/ home exercise program**
- **Began in the pool**
 - Emphasized relaxation of cervical spine, all UE, & upper trunk musculature – *NOODLES!*
 - Range of motion
 - Resistive exercise against water
 - Without & with weights
 - Building up tolerance for touch
- **Progressed slowly to land**
 - More weight
 - More exercises
 - Stimulating skin & bearing weight through the arm & shoulder



After 4 months of PT



ASK

**FOR WHAT YOU
WANT – BELIEVE
YOU ARE
WORTHY
TO RECEIVE IT**



Questions?

Thank You!



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