

# Oncology Rehabilitation

Christa Newgent MS,PT,CLT  
Andrews Institute Rehabilitation

## Objectives

- Understand how to identify a patient in need of cancer rehab
- Become familiar with cancer rehab and the therapists' role in recovery
- Know the common sequelae and side effects of cancer treatment
- Understand how to use clinical decision making skills to provide specific treatment

## What is Cancer Rehab?

- Cancer rehab is similar to other forms of rehab
- Cancer can cause multiple impairments, activity limitations, and participation restrictions at work, home, and in the community.
- If a patient has any problems that he/she didn't have before their diagnosis, especially if they interfere with one's ability to function or quality of life; they are a candidate for cancer rehabilitation
- Cancer rehabilitation can improve our patient's quality of life—whether they are going through treatment now, finished recently or long ago



## Identifying Rehab Needs

- Most patients requiring cancer rehab are identified post treatment by their PCP or specialists.
- Physical side effects from cancer treatments can last for years post treatment, and not reported immediately.
- 70% of individual receiving medical intervention for cancer will experience 1 or more physical impairments as a result.
- Healthcare providers must address rehab needs to prevent development of disability, restore pre-morbid status, reduce work-related limitations, maintain ability for one to care for oneself.

## Physical Therapy Addresses:

- Quality of Life
- Pain
- Range of motion restrictions (AWS)
- Lymphedema
- Radiation Fibrosis Syndrome
- Gait and balance disturbances
- Cancer related fatigue

## History of Clinical Advice

**Rest and decrease your level of daily activities**

- Intention of risk averse advice was to avoid:
  1. overuse
  2. injury
  3. infection
  4. trauma



## Pain

- Pain is a common side effect of cancer treatment.
- Pain is frequently due to pre-existing orthopedic condition exacerbated by cancer treatments.
- PT addresses pain with a variety of treatment approaches, addressing the source and reducing the risk of any future recurrence.

## ROM Restrictions: Axillary Web Syndrome

- AWS is clinically found to be a common cause of shoulder dysfunction, pain, and ROM restrictions following breast surgery for the treatment of cancer.
- In 2001 Dr. Moskovitz coined the term "Axillary Web Syndrome"
- "The defining characteristic of this syndrome is a visible web of axillary skin overlying palpable cords of tissue that are made taut and painful by shoulder abduction."

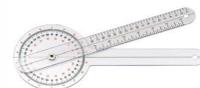


## What are the cords?

- There is not a lot of available tissue samples of the cords.
- What is available from cadavers or surgical excisions indicates that the cords are likely thrombosed lymphatic vessels. Other biopsies revealed small thrombosed veins.
- Disruption of the lymph flow from lymph node dissection leads to lymph stasis. Lymph fluid is protein rich fluid. Accumulation of the protein rich fluid in the interstitium leads to fibrosis.
- This fibrosis results in cording and causes the cords to stick to surrounding tissue, thus limiting movement of the arm and causing pain.

## What are we seeing clinically?

- Patients present with complaints of under arm pain, not in the joint.
- Full or almost full range of motion with internal and external rotation.
- Limited flexion and abduction; abduction is usually worse.
- Cords are visible always with abduction or traction of the skin while in abduction.
- Cords are sometimes visible in the antecubital space.
- Patients frequently subjectively complain of pain all the way into the thumb, but cords not always visible past the elbow.



## Key Points for AWS Identification

- Onset usually 2-4 weeks post op, but not typically reported at that time
- Onset accelerated by bruising, seroma, and infection
- More common in women with BMI <25
- Pain/pulling in axilla and along medial upper arm and elbow
- Occasionally into wrist and base of thumb
- Treat gently with manual therapy and exercises
- Typical course of treatment is 1-2x/week for 3-6 weeks with 45 minute sessions
- May discharge with remaining cords, if no functional impairments

## Lymphedema

- Lymphedema is defined as an abnormal accumulation of excessive tissue proteins, fluid, and fibrosis
- This can result from cancer treatment anywhere in the body
- Left untreated, it can result in pain, deformity, increased risk of recurrent infection, psychosocial distress, disuse atrophy, and functional limitations.



## Usual Signs and Symptoms

- Onset can be slow or rapid
- Progressive
- Pitting (varies)
- Often starts distally (squaring of toes, loss of anatomical contours)
- Skin changes (hyperkeratosis, papillomas, lymph cysts ...)
- Cellulitis is common
- Discomfort is common (heaviness, aching,...)



Fig. 5.24 Positive Steiner's sign on the right side. (© 150)

## Radiation Fibrosis Syndrome

- Describes the manifestations of post radiation problems
- It is a progressive fibrotic sclerosis that can affect any tissue
- *Cancer Rehabilitation* states "No single modality is more important in the successful treatment of RFS than physical and occupational therapy."



## Gait and Balance

- Many patients have difficulty walking due to poor endurance and balance
- One common side effect is chemotherapy induced peripheral neuropathy (CIPN)
- Chemotherapy drugs can injure nerves
- Develops in 50-60% of patients treated with taxanes



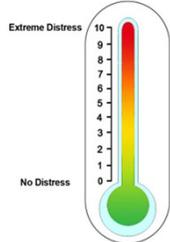
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## What we Know

- Cancer survivors have physical problems due to the various treatments they undergo.
- Most survivors do not receive the rehabilitation services that would help them to physically and emotionally heal as well as possible.
- **Cancer rehabilitation can help to lessen and alleviate impairments and allow patients to function at a higher level sooner, rather than later.**

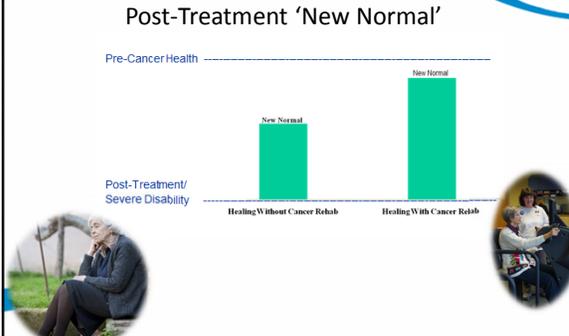
## Who is a candidate for cancer rehabilitation?

If your patients have any problems that they didn't have before cancer treatments, especially if they interfere with their ability to function or quality of life, they are a candidate for cancer rehabilitation.



## Post-Treatment 'New Normal'

Pre-Cancer Health \_\_\_\_\_



Post-Treatment/ Severe Disability \_\_\_\_\_

Healing Without Cancer Rehab      Healing With Cancer Rehab

## Acknowledgments



- Fialka-Moser V, Crevenna R, Korpan M, Quittan M. Cancer Rehabilitation: Particularly with Aspects on Physical Impairments. *J Rehabil Med* 2003; 35: 153-162
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