Shifting Paradigms in Cancer Rehabilitation

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Cancer Rehabilitation

Disclosures
None

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Objectives
• Understand the role of the rehabilitation service in the comprehensive care of the cancer survivors.
• Describe the common disorders (neuromuscular, musculoskeletal, functional and other) likely to benefit from a comprehensive cancer rehabilitation program.
• Identify the key components necessary for a successful, effective, and respected comprehensive cancer rehabilitation program.
What is a Cancer Rehabilitation?

Cancer Rehabilitation

Job Description

A specialist in the identification, evaluation, and rehabilitation of neuromuscular, musculoskeletal, and functional disorders associated with cancer and its treatment emphasizing the restoration and maintenance of function and quality of life.

Cancer Rehabilitation

“The Dirty Little Secret”

The principles and practice of cancer rehabilitation are generally similar to those of general rehabilitation…
Cancer Rehabilitation
Successful Rehabilitation Requires and Understanding of:

- Cancer
- Cancer treatments
  - Surgery
  - Chemotherapy
  - Radiation Therapy
  - Hormonal Therapy
  - Biologic Therapy
- Pre-existing disorders
- The interrelationship between all of the above

Cancer Rehabilitation
The Cancer Continuum

What is a Cancer Survivor?
Cancer Rehabilitation

What is a Cancer Survivor?

A person who has received a cancer diagnosis but is considered free of active disease and who has completed their primary cancer treatment, although some may remain on maintenance therapy such as Tamoxifen, etc.

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Cancer Survivor “Official” Definitions

The National Coalition for Cancer Survivors (NCCS) defines a ‘cancer survivor’ as being ‘from the point of diagnosis and for the balance of life’.

The National Cancer Institute (NCI) states that “survivorship covers the physical, psychosocial, and economic issues of cancer, from diagnosis until the end of life. It focuses on the health and life of a person with cancer beyond the diagnosis and treatment phases. Survivorship includes issues related to the ability to get health care and follow-up treatment, late effects of treatment, second cancers, and quality of life. Family members, friends, and caregivers are also part of the survivorship experience.”

1 http://www.cancer.gov/dictionary?CdrID=445089

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Contemporary Perspective: United States

• 13.8 million Cancer Survivors in 2010
• 18.1 million Cancer Survivors by 2020
• There are less than 3 hundred thousand survivors of spinal cord injury as reported in 2008.
• Approximately 65% of persons diagnosed with cancer today can expect to live at least 5 years after diagnosis compared with only 35% in the 1950’s.
• Patients are increasingly described as “cancer survivors” as opposed to “cancer victims”.

Cancer Rehabilitation
US Estimate of Survivors vs. New Cancer Diagnoses and Deaths in 2010

Cancer Statistics
- Survivors
- New Cancers
- Cancer Deaths

Cancer Rehabilitation
Spectrum of Need in Cancer Survivors
- Mild
- Moderate
- Severe

Cancer Rehabilitation
Neuromuscular and Musculoskeletal Disorders Commonly Seen in Cancer Patients
- Neuromuscular
  - Cerebropathy
  - Myelopathy
  - Radiculopathy
  - Plexopathy
  - Neuropathy
    - Polyneuropathy
    - Mononeuropathy
    - Mononeuropathy Multiplex
    - Ganglionopathy
    - Small Fiber
    - Myopathy
    - Disorders of Neuromuscular Transmission
- Musculoskeletal
  - Rotator Cuff Tendonitis
  - Adhesive Capsulitis
  - Epicondylitis
  - De Quervain’s Tendovaginitis
  - Neuroforaminal/Central Stenosis
  - Spinal Instability
  - Fracture/Impending Fracture
  - Arthritis
  - Enthesopathy
  - Osteoporosis
  - GVHD

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Cancer Rehabilitation
Other Disorders Commonly Seen in Cancer Patients

- Lymphedema
- Fatigue
- Myalgia
- Fibromyalgia
- Cardiac insufficiency
- Pulmonary insufficiency
- Bowel and bladder dysfunction
- Autonomic dysfunction
- Baroreceptor failure
- Cognitive dysfunction
- Psychiatric dysfunction
- Psychosocial dysfunction

The Cancer Rehabilitation Team

Cancer Rehabilitation
The Core Rehabilitation Team

- Rehabilitation Medicine
- Physical Therapy
- Occupational Therapy
- Lymphedema Therapy
- Prosthetics & Orthotics
- Speech & Language Pathology
Cancer Rehabilitation
The Medical Team

- Medical Oncology
- Surgical Oncology
- Radiation Oncology
- Anesthesia Pain
- Pain & Palliative Care
- Rehabilitation Medicine
- Psychiatry
- Primary Care
- Internal Medicine
  - Cardiology
  - Endocrinology
  - Gerontology
  - Nephrology
  - Pulmonology
  - Rheumatology

Cancer Rehabilitation
The Support Team

- Chaplaincy
- Nursing
- Nutrition
- Psychology
- Social Work
- Vocational Counselors
- Family
- Everyone Else

Cancer Rehabilitation
Pain Management Teams

- Pain and Palliative Care
- Rehabilitation Medicine
- Anesthesia Pain
What Constitutes a Comprehensive Cancer Rehabilitation Program?

Cancer Rehabilitation
What is Comprehensive?

- National Cancer Institute (NCI)
  - 41 Comprehensive Cancer Centers

- National Comprehensive Cancer Network (NCCN)
  - 21 Member Institutions

Cancer Rehabilitation
Change in Oncology Practice

- 1980s
  - The majority of cancer care delivered in large specialized tertiary cancer centers

- Present day
  - Most cancer care delivered in physician-owned practices
    - Earlier detection
    - Improved treatments (less radical surgery, combined-modality therapy, and adjuvant endocrine therapy)
  - Hospitalized patients have shorter stays
Cancer Rehabilitation
Early Cancer Rehabilitation Programs

• Early 1980s
  – At least 36 cancer rehabilitation programs in the US
  – Programs were generally multidisciplinary, hospital-based and either integrated into a rehabilitation service or an oncology department


Cancer Rehabilitation
From Cancer Patient to Cancer Survivor: Lost in Transition

• 2006 Institute of Medicine (IOM) report
• Discussed the contribution of rehabilitation services in helping cancer survivors “regain and improve their physical, psychosocial, and vocational function within the limitation imposed by the disease and its treatment.”
• The IOM report noted the paucity of organized cancer rehabilitation programs and practitioners
• The few programs that exist are generally housed within hospital-based physical medicine and rehabilitation programs or in large cancer centers.
• With the shift in cancer care from the inpatient to the outpatient setting the IOM report raised the concern that the rehabilitation needs of cancer survivors are not being met.


Cancer Rehabilitation
Does Lymphedema = Comprehensive?

A 2002 study of services offered by National Cancer Institute (NCI) -designated comprehensive cancer centers demonstrated that 70% had a lymphedema management program but no other cancer rehabilitation program.

Cancer Rehabilitation
Does Accreditation = Comprehensive?

- American College of Surgeons Commission on Cancer (CoC)
  - 1508 CoC-accredited programs in the United States and Puerto Rico treating 71% of all new diagnosed cancer patients annually.
  - Cancer Program Standards 2012 concerning rehabilitation services states that they “can be provided either on-site or by referral to hospitals, freestanding facilities, physician offices, or local community agencies that are external to the CoC-accredited cancer program.”
  - Does NOT make recommendations concerning the type or quality of rehabilitation services that should be offered.
  - Does NOT set minimal standards for rehabilitation services
  - Does NOT seek to provide guidance as to what constitutes comprehensive cancer rehabilitation or set minimal standards that will in any way improve the quality of rehabilitation services in the future.

Key Components of a Successful Comprehensive Cancer Rehabilitation Program

- A busy comprehensive cancer center or program treating patients from a multitude of disease types
- An understanding of the cancer survivor’s rehabilitation needs
- A commitment to addressing long-term needs of cancer survivors, particularly those with the greatest functional impairments (i.e., not just lymphedema and fatigue), and a willingness to create a culture dedicated to addressing those needs
- Skilled and highly trained cancer rehabilitation physicians and therapists (PT’s and OT’s) – both need to be created.
- Facilities suitable for the practice of cancer rehabilitation

Benefits of a Cancer Rehabilitation Program
Cancer Rehabilitation
Benefits

- Enhanced patient care
- Decompress oncology practitioners
- Revenue generation
- Resident & fellow training
- Prestige & marketing
- Research
- Program development

Cancer Rehabilitation
Growth of Outpatient Physician Practice at MSKCC

Number of Outpatient Visits

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<th>Year</th>
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<tr>
<td>2011</td>
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Cancer Rehabilitation
Revenue Generators

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<tr>
<th>Intervention</th>
<th>Relative Revenue</th>
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<tbody>
<tr>
<td>Physical/Occupational Therapy</td>
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<td>Botulinum Toxin Injection</td>
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<tr>
<td>Fluoroscopic Injection</td>
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<tr>
<td>USG-guided Injection</td>
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<tr>
<td>New Patient Visit (Level 4 &amp; 5)</td>
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<tr>
<td>EMG</td>
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<tr>
<td>Joint Injection</td>
<td>$$</td>
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<tr>
<td>Trigger Point Injection</td>
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<tr>
<td>Follow-up Visit (Level 3 &amp; 4)</td>
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Cancer Rehabilitation
Education

- Training
  - Residents
  - Fellows
  - Therapists
- Cancer Rehabilitation Symposium
- Lectures at National & International Meetings
- Leadership Development
- Patient Outreach
- Develop other Cancer Rehabilitation Programs

Cancer Rehabilitation
Program Development

- Extensive opportunity
  - QI projects
  - Community outreach
  - Program expansion

Thank You