The Interdisciplinary Rehabilitation Care Team and the Role of Physical Therapy in Survivor Exercise

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Background: Rehabilitation professionals offer expertise in functional assessment, treatment of impairments and functional limitations, and disability prevention. To optimize recovery, and often prior to participating in community-based exercise programming, survivors may need rehabilitation services from a range of healthcare professionals, including physiatrists, nurses, nutritionists, psychologists, and speech, occupational, and physical therapists. Survivors with physical impairments and functional limitations may benefit from interdisciplinary rehabilitation and physical therapy, including tailored therapeutic exercise interventions.

Objectives: Survivors with physical impairments and functional limitations may benefit from interdisciplinary rehabilitation care team can help facilitate the survivor’s transition to community-based exercise programming.

Methods: A literature review was conducted using the key words cancer survivor, cancer rehabilitation, impairment, fatigue, lymphedema, chemotherapy-induced peripheral neuropathy, and exercise. MEDLINE®, EMBASE, Cochrane Database of Systematic Reviews, and CINAHL® databases were searched.

Findings: Nurses play a critical role in identifying survivors whose function or fitness is compromised to the point where participation in community-based exercise programming would be inappropriate or unsafe. The interdisciplinary rehabilitation care team can help facilitate the survivor’s transition to community-based exercise programming.

Cancer treatment introduces risk for impairments and functional limitations that increase the potential for disability and reduced quality of life (QOL) (Stout et al., 2016). Research evidence supports timely and appropriate cancer rehabilitation to optimize recovery from cancer and to allow the survivor to live life to the fullest (Stout et al., 2016). Exercise has emerged as an effective long-term rehabilitation intervention that can improve and optimize the health and well-being of cancer survivors (Dennett, Peiris, Shields, Prendergast, & Taylor, 2016). Benefits from exercise include increased lean body mass and physical function, reduced pain and fatigue, and improved QOL (Dennett et al., 2016; McNeely et al., 2006). In addition, for some survivors, exercise may increase overall and cancer-specific survival (Ballard-Barbash et al., 2012; Ibrahim & Al-Homaidh, 2011; Kenfield, Stampfer, Giovannucci, & Chan, 2011; Moorman, Jones, Akushevich, & Schildkraut, 2011).

Despite the known benefits, few cancer survivors report meeting the minimal public health guidelines for physical activity (Boyle, Lynch, Courneya, & Vallance, 2015; Boyle, Vallance, Ransom, & Lynch, 2016). Many survivors report feeling neither physically ready nor prepared to engage in community-based exercise programs designed for the general public (Cheifetz et al., 2014) and cite impairments, such as pain and fatigue, as barriers to participation (Courneya et al., 2005, 2008; Rogers et al., 2008). Although practice guidelines often recommend increased physical activity and exercise to address physical impairments, details are generally vague and largely mimic public health recommendations of 150 minutes of moderate-to-vigorous exercise per week, with only limited consideration to the type of impairment or its severity (Rock et al., 2012). In addition, exercise specialists working in the community are not trained to address cancer-related impairments (Silver, Baima, & Mayer, 2013). Therefore, a need exists for cancer rehabilitation

Key words: cancer; physical therapy; cancer rehabilitation; impairment; exercise

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professionals, such as physical therapists, to first address these impairments and then to work collaboratively with exercise specialists to support survivors as they transition to community-based exercise programming (Silver et al., 2013).

In this article, the authors discuss the role of physical therapy in cancer survivor exercise, with a focus on when a nurse may refer a survivor to physical therapy and how the interdisciplinary rehabilitation care team can help address the gap in service from acute cancer care to community-based exercise programming.

Cancer Rehabilitation

Rehabilitation professionals offer expertise in functional assessment, treatment of impairments and functional limitations, and disability prevention (Silver et al., 2013; Stubblefield, 2011). To optimize recovery, and in many cases prior to participating in community-based exercise programming, survivors may need rehabilitation services from a range of healthcare professionals, including physiatrists, nurses, nutritionists, psychologists, and speech, occupational, and physical therapists (Silver et al., 2013; Stubblefield, 2011).

Physical therapists play an important role in helping individuals overcome pain and disability related to functioning of the musculoskeletal, neurologic, and cardiorespiratory systems. Physical therapy is usually delivered on a one-to-one basis, is person-centered, and involves tailored interventions to address impairments and functional limitations. The physical therapist may recommend a combination of interventions, such as active and passive exercises, manual therapy, and provision of electrophysical modalities. In the cancer area, physical therapy has been traditionally prescribed in the acute care setting following surgery for breast and other cancers; however, it is emerging as an important component of cancer care, and accumulating clinical evidence supports its efficacy before, during, and after cancer treatment (Bernardo-Filho et al., 2014; Donnelly et al., 2010; Silver et al., 2013).

Physical therapists and exercise specialists use exercise and physical movement to improve the condition of survivors suffering from the effects of cancer and cancer treatment. Physical therapists focus on addressing impairments and restoring movement to restricted parts of the body. Exercise specialists use scientifically based exercise principles to enhance the overall strength, endurance, and fitness of survivors who may be deconditioned as a result of their cancer or cancer treatment (Jones, Eves, & Peppercorn, 2010). Referral to community-based exercise programming is appropriate for survivors who are deemed low risk, have no apparent physical limitations or impairments, or have received medical clearance for unrestricted exercise participation (Burr, Shephard, & Jones, 2012; Jones, 2011; Jones et al., 2010). Therefore, the determining factor in terms of when to refer the survivor directly to community-based exercise or to physical therapy largely revolves around the presence or absence of impairments and functional limitations.

Screening for Impairments and Limitations

Nurses play a critical role in screening for impairments and functional limitations to help identify survivors who may benefit from the interdisciplinary cancer rehabilitation team and/or physical therapy prior to engaging in community-based exercise. Screening for functional limitations (from mild to severe) can be accomplished by administering one or more of a number of valid and reliable clinical screening tools, including the Karnofsky Performance Status scale, the Eastern Cooperative Oncology Group (ECOG) scale, or the SF-36®.

Poor performance status and physical disability are leading causes of distress in cancer survivors (Silver et al., 2013). Therefore, for nurses, using a screening tool for distress is an alternative method to identify survivors with impairments in need of referral to physical therapy or rehabilitation services. One recommended method of screening for distress involves the administration of a combined form that includes the Edmonton Symptom Assessment System revised scale (ESAS-r) and the Canadian Problem Checklist (CPC) (Pereira et al., 2014; Savard, Ivers, & Savard, 2016; Watanabe, Nekolaichuk, & Beaumont, 2012). The ESAS-r is a valid and reliable measure that includes nine commonly reported symptoms, such as pain, tiredness, shortness of breath, and lack of well-being (Pereira et al., 2014). Survivors are asked to rate their current symptoms on a numeric scale ranging from 0 (no tiredness) to 10 (worst possible tiredness) (Watanabe et al., 2012). The CPC was adapted from a checklist published by the National Comprehensive Cancer Network (NCCN) and

![FIGURE 1. Process for Triage to Interdisciplinary Rehabilitation Care Team, Physical Therapy, and Community-Based Exercise](image-url)
screens for other emotional and physical problems, as well as practical concerns not captured on the ESAS-r (Linden, Yi, Barroetavena, MacKenzie, & Doll, 2005; Watson et al., 2016). The CPC asks survivors to “please check all of the following items that have been a concern or problem for you in the past week, including today.” CPC categories include practical (e.g., work, school, finances), social/family (e.g., relationship difficulties, feeling alone), sadness (e.g., frustration, anger), spiritual (e.g., purpose of life, faith), informational (e.g., understanding illness and/or treatment), and physical (e.g., concentration/memory, sleep) (Linden et al., 2005; Watanabe et al., 2012). Another method of screening recommended by the NCCN is the Distress Thermometer, a validated self-report tool that uses a scale of 0–10 for rating distress experienced by survivors (Lo, Ianniello, Sharma, Sarnacki, & Finn, 2016; Mitchell, 2007). Once a problem is identified, the nurse is cued to follow a recommended care pathway that may involve medical evaluation, intervention, and referral, as needed, to other disciplines.

Referral Pathway and Model of Care

In this article, the authors propose a referral pathway (see Figure 1) and model of care (see Figure 2) that aim to describe how survivors with impairments and functional limitations can be supported to undertake exercise and successfully transition to self-directed community or home-based exercise. In the model, survivors with resolving acute effects of treatment and/or mild physical impairments or functional limitations, who are medically approved for unrestricted physical activity, are referred directly to community-based exercise. The nurse may provide the survivor with education and resources to support healthy lifestyle practices and give advice on safe return to exercise and activity. If cancer-specific exercise programming or expertise is available in the community, the survivor may be able to access the support of an exercise specialist who is specially trained to work with cancer survivors.

In the case of survivors with one or more physical impairments, or impairments that are moderate in severity, the nurse would refer the survivor to physical therapy for a focused therapeutic exercise intervention. Generally, physical therapy is indicated when a survivor’s function or fitness is compromised such that referral to community-based programming would be inappropriate or unsafe. The therapeutic intervention allows for tailoring of the exercise prescription and closer monitoring of exercise response (e.g., symptoms, heart rate, blood pressure, oxygen saturation). The aim of the physical therapy intervention is to minimize side effects and restore adequate function, so the survivor can progress to community-based exercise.

Survivors with unstable status, poorly controlled or complex impairments, or functional limitations are best managed by the interdisciplinary rehabilitation care team. The team can perform a comprehensive evaluation and recommend an intervention plan. Once the plan is in place, the survivor may undergo exercise programming under the supervision of a physical therapist or proceed directly to community-based exercise.

Common Treatment-Related Impairments

Cancer-Related Fatigue

Cancer-related fatigue (CRF) is the most common side effect of cancer, affecting a majority of survivors (NCCN, 2016). CRF refers to a state of unrelenting tiredness that manifests following a cancer diagnosis. With CRF, exhaustion is disproportionate to energy expenditure and inconsistently relieved by rest (Weis & Heim, 2015). Survivors often report feeling exhausted by everyday tasks, such as showering, walking to the mailbox, and socializing with friends (Minton et al., 2013). Therefore, CRF negatively affects QOL and all aspects of activity engagement for survivors (Dolland et al., 2016).

The pathology of CRF is not well understood, and the presentation can vary widely among survivors, rendering treatment of CRF a challenge from the perspective of prescribing exercise (Howell et al., 2013). Research suggests that early recognition of CRF and more immediate intervention can elicit greater responses to treatment and support (Silver & Baima, 2013). Although many scales exist for measuring CRF, even a subjective conversation about energy and motivation can be valuable in determining whether or not a survivor would benefit from referral to the physical therapy.
and/or the interdisciplinary rehabilitation team (Silver et al., 2013). The NCCN (2016) guidelines recommend regular screening for the presence and severity of CRF using a numerical rating scale ranging from 0 (no fatigue) to 10 (worst fatigue imaginable). Mild fatigue is indicated as a score of 1–3, moderate fatigue as 4–6, and severe fatigue as 7–10, these scores correspond to comparable levels for tiredness on the ESAS-r (NCCN, 2016; Watanabe et al., 2012). To date, research supports cognitive behavioral therapy (a type of psychotherapy) and exercise interventions as providing the best results for the management of CRF (Bower et al., 2014). The overarching goal of fatigue rehabilitation therapy is twofold: reduction of symptoms and energy maximization (Connolly, O’Toole, Redmond, & Smith, 2013) (see Table 1).

Survivors experiencing mild fatigue may be referred for community-based exercise programming. These survivors should receive counseling on the value of self-monitoring their participation in and response to other potentially fatiguing daily or work activities, as well as their response during and following exercise sessions, to allow for appropriate and timely modification of the exercise program.

Survivors reporting moderate to severe subjective CRF (i.e., a score of 4 or greater on a visual analog scale of 0–10) undergo a focused history and medical examination to identify potentially contributing factors, such as pain, anemia, sleep disturbance, and underlying psychosocial issues (NCCN, 2016). For survivors with moderate fatigue, a physical therapy assessment may aid in determining the best starting point of exercise in terms of intensity and volume, and a tailored therapeutic exercise program prescribed to appropriately and progressively challenge the survivor’s physiologic body systems such that positive adaptations to exercise occur. A physical therapy intervention may also address associated symptoms, such as pain. The anticipated response to a therapeutic exercise regimen is similar to that of general physical exercise; adaptations include improved physical fitness and performance so that energy efficiency and capacity are enhanced. For the survivor, benefit is observed as less fatigue is experienced when carrying out day-to-day activities (Courneya, Vallance, McNeely, & Peddle, 2006).

Importantly, survivors with moderate to severe CRF would benefit from involvement of the interdisciplinary rehabilitation team where rehabilitative therapy may include concurrent nutrition and psychosocial counseling, along with education on energy conservation and maximization. The occupational therapists can counsel the survivor on how to best manage limitations in activity tolerance through grading tasks, reducing activities into component parts, using peak energy times, and progressing functional mobility. Counseling on energy maximization may include recommendations of a four P strategy: planning, prioritizing, pacing, and positioning (Connolly et al., 2013). These terms refer to a process of allowing the survivor to determine meaningful activities in which they wish to engage, discerning how much activity they can tolerate, and then providing additional strategies based on current level of function to make those activities accessible. To best address fatigue, a balance is required to manage the energy that a person has; therefore, limiting activities may, at times, be necessary in addition to resting prior to engaging in important tasks (Minton et al., 2013). Symptom flares and excessive post-exercise fatigue require adjustment to the exercise prescription (McNeely & Courneya, 2010; Ogilvy, Livingstone, & Prue, 2008). Although fatigue may persist, with appropriately prescribed exercise and activity pacing, the survivor should notice an increased ability to complete daily tasks and meaningful activities, as well as a reduction in the severity of symptoms over time (McNeely & Courneya, 2010).

**Lymphedema**

Lymphedema remains a prevalent and potentially debilitating side effect of cancer treatment (Hayes et al., 2012; Paskett, Dean, Oliveri, & Harrop, 2012). Lymphedema is a local swelling in a body region that results from surgical removal of, or damage to, lymph nodes in the area (Norman et al., 2009; Paskett et al., 2012). When treated conservatively in the earliest stages, complications of lymphedema may be diminished or reversed (International Society of Lymphology, 2009). Unfortunately, lymphedema is often chronic in nature and may be associated with pain, limited range of motion, heaviness, loss of strength, and functional limitations (Paskett et al., 2012; Singh, Disipio, Peake, & Hayes, 2016), requiring lifelong attention and management (Lawenda, Mondry, & Johnstone, 2009; Norman et al., 2009; Singer, 2009).

<table>
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<tr>
<th>Fatigue*</th>
<th>Recommendation</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild (0–3)</td>
<td>Referral to community or home exercise</td>
<td>Instruct survivor in self-monitoring of fatigue response during and following exercise; modify program as necessary based on response. Provide counseling on potential need to start with lower intensity and volume of exercise, with goal to progress to physical activity guidelines of 150 minutes.</td>
</tr>
<tr>
<td>Moderate (4–6)</td>
<td>Referral to physical therapy</td>
<td>Physical therapy intervention to address any other associated impairments or functional limitations Tailored exercise prescription. Consider starting with resistance exercise training prior to introducing aerobic exercise.</td>
</tr>
<tr>
<td>Severe (7–10)</td>
<td>Referral to the interdisciplinary care team</td>
<td>Medical assessment prior to exercise testing or training Rehabilitation team assessment and intervention as indicated Referral to physical therapy recommended to determine starting point of exercise. Consider starting with active range of motion, gravity-only resistance, and functional activities, and progress to light weights as tolerated.</td>
</tr>
</tbody>
</table>

* Based on scores ranging from 0–10 on a visual analog scale.

**Note.** Based on information from Courneya et al., 2006; National Comprehensive Cancer Network, 2016; Silver et al., 2013.
The presence of lymphedema is often a barrier to general physical exercise participation, and a true need exists for caution because inappropriately prescribed or performed exercise can lead to injury and increase lymphedema symptoms. Evidence supports the safety of aerobic and resistance exercise training for those with lymphedema, providing that the exercise is gradually progressive, and the survivor’s lymphedema is monitored regularly by a healthcare professional specialized in lymphedema (Cormie, Galvao, Spry, & Newton, 2013; Cormie, Pumpa, et al., 2013; Schmitz, Ahmed, et al., 2009; Schmitz, Troxel, et al., 2009; Singh et al., 2016). Although strong evidence supports the use of exercise for lymphedema, no protocols have been published to specifically guide programming in the community-based setting.

Prior to taking part in community-based exercise, a survivor presenting with cancer-related lymphedema should be referred to a physical or occupational therapist with recognized expertise and certification in lymphedema (National Lymphedema Network, 2013). The therapist can perform an assessment to establish baseline limb volume and status and provide education and counseling on how the survivor can best introduce exercise into his or her self-management program (see Table 2). For individuals with mild to moderate lymphedema, the therapist can ensure that the condition is stable and that the survivor has a suitable compression garment to wear during exercise. Advice can be provided on self-management guidelines, self-monitoring techniques, and recommendations for safe exercise progression. As an example, survivors with moderate lymphedema may benefit from starting with progressive resistance exercise training using light weights and progressing the resistance as tolerated (Schmitz, Ahmed, et al., 2009).

Survivors with severe lymphedema may require involvement of the interdisciplinary rehabilitation team (McCaulley & Smith, 2014). Nutrition counselling may be needed for survivors who are overweight or obese (McCaulley & Smith, 2014). An occupational therapist can assess function and recommend supports or aids to improve comfort or function. The physical therapist may prescribe therapeutic exercise to improve range of motion, muscle strength, and increase lymphatic and venous return from the affected area (Paskett et al., 2012; Singh et al., 2016). Unique to lymphedema is the incorporation of diaphragmatic breathing and remedial exercises to enhance the muscle-pumping effect on lymphatic vessels and veins in the region (Bergmann et al., 2014; Douglass, Graves, & Gordon, 2016). Importantly, for survivors with severe lymphedema, a resistance exercise protocol that includes enhanced compression on the limb (e.g., compression bandaging) may be beneficial in optimizing limb volume and symptom outcomes (Bok, Jeon, & Hwang, 2016).

**Chemotherapy-Induced Peripheral Neuropathy**

Chemotherapy-induced peripheral neuropathy (CIPN) is a neuropathy affecting the peripheral nervous system, caused by chemotherapy (Kaley & Deangelis, 2009). CIPN is a relatively common adverse event resulting from the use of neurotoxic chemotherapeutic and biologic agents. The incidence and prevalence of CIPN have increased and are related to longer chemotherapy dosing protocols, increased use of combination chemotherapy, and improved cancer survival (Visovsky, 2003).

CIPN presents with a range of effects to sensory, motor, and autonomic nervous systems. Sensory symptoms tend to be the most common, often in a symmetrical stocking-glove pattern, occurring in the toes and fingers first (Visovsky, 2003). Sensory symptoms may initially involve unpleasant tingling or burning sensations and progress to numbness. These sensory changes may affect proprioception and lead to balance deficits or ataxia (Wickham, 2007; Windebank & Grisold, 2008). Frequently, motor effects are seen in CIPN, including loss of strength, muscle cramps, and spontaneous movements (Windebank & Grisold, 2008). Although rare, the autonomic nervous system can also be affected, resulting in symptoms like constipation, bladder problems, and orthostatic hypotension (Windebank & Grisold, 2008). Current treatment strategies for CIPN include modifying, delaying, or discontinuing chemotherapy treatment (Stubblefield, McNeely, Alfano, & Mayer, 2012). Despite a lack of research evidence, a strong rationale exists for rehabilitation intervention to address symptoms and for involvement in exercise to improve overall health and fitness (see Table 3).

Survivors with mild symptoms associated with CIPN may benefit from education and counseling

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**TABLE 2. Exercise Program Considerations for Lymphedema Severity**

<table>
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<tr>
<th>Lymphedema</th>
<th>Recommendation</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild, stable</td>
<td>Referral to community-based exercise</td>
<td>Instruct survivor in self-monitoring during and following exercise; modify program as necessary. Physical therapy to establish baseline of lymphedema status and ensure properly fitted compression garment for wear during exercise. Follow general physical activity guidelines.</td>
</tr>
<tr>
<td>Moderate</td>
<td>Referral to physical therapy</td>
<td>Physical therapy intervention to address any other associated impairments or functional limitations. Survivor to consider short stretch compression garment for wear during exercise. Consider starting with resistance exercise training using light weights.</td>
</tr>
<tr>
<td>Severe</td>
<td>Referral to the interdisciplinary care team</td>
<td>Interdisciplinary care team assessment and intervention as indicated (e.g., nutrition counseling if overweight or obese). Consider enhanced compression on limb during exercise (i.e., compression bandaging). Consider starting with lymphedema-specific exercises to enhance muscle pump; progress exercise based on tolerance and response.</td>
</tr>
</tbody>
</table>
Implications for Practice

- Screen for impairments and functional limitations as part of routine clinic care.
- Provide evidence-based education to survivors to support safe and effective exercise.
- Identify the needs of the survivor and triage, as appropriate, to the interdisciplinary care team, physical therapy, or community-based exercise.

on safe exercise, along with referral to community-based exercise. Exercise has been shown to have positive effects on peripheral neuropathy caused by conditions like diabetes (Balducci et al., 2006). Exercise may improve or attenuate symptoms of CIPN through local effects on peripheral nerves, by reducing pain, and by improving physical function (Pfefer, 2010; Wonders, Reigle, & Drury, 2010). Aerobic exercise, such as cycling on a stationary bike, can be prescribed to improve cardiorespiratory fitness and reduce any associated symptoms of fatigue (Courneya et al., 2006).

Survivors with moderate CIPN that affects muscle control, balance, and coordination are at higher risk of falling when exercising (Stubblefield, 2011; Stubblefield et al., 2012). Physical therapists can provide therapeutic interventions to address pain, as well as any deficits in range of motion and muscular strength. The physical therapist can prescribe a tailored therapeutic exercise program that involves exercises for the small muscles of the hands and feet, as well as resistance exercises to address weakness in anti-gravity lower extremity muscles that may be contributing to deficits in gait and function (Stubblefield, 2011). The survivor may further benefit from balance and gait retraining and the provision of gait aids, orthotics, and assistive devices (Stubblefield et al., 2012).

Survivors with severe CIPN that limits self-care activities and daily living require assessment and intervention of the interdisciplinary rehabilitation care team. These survivors likely require combined pharmacologic and rehabilitation interventions to address pain and aids to optimize overall function. An occupational therapist can evaluate the need for assistive devices and adaptive equipment to help the survivor compensate for difficulties with tasks at home or work (Lemoignan, Chasen, & Bhargava, 2010; Paice, 2011). This may include the provision of easy-grip or support-grip handles, adapted utensils, button hooks, and bathroom aids (Lemoignan et al., 2010). In addition, the occupational therapist can educate the survivor on strategies to optimize func-

tion, to address safety in the home, and provide walking aids such as braces, a cane, or a walker (Stubblefield et al., 2012). If the chemotherapy has affected the autonomic nervous system, blood pressure and heart rate may not respond normally to exercise (Stubblefield et al., 2012). In addition, the survivor may experience dizziness or lightheadedness during or following exercise. Therefore, for safety reasons, a medically supervised exercise program under the direction of a physical therapist is indicated so that heart rate, blood pressure, and other symptoms can be closely monitored.

Conclusion

Rehabilitation professionals offer expertise in functional assessment, treatment of impairments and functional limitations, and disability prevention. Survivors with physical impairments and functional limitations may benefit from interdisciplinary assessment and rehabilitation intervention, as well as physical therapy treatment, including a tailored therapeutic exercise intervention. The authors propose a model of care that aims to support cancer survivors to take part in exercise and transition to community-based and home exercise programming. The model proposes person-centered exercise guidance and prescription to optimize outcomes from cancer treatment and promote overall health and wellness into survivorship. Nurses are well positioned to identify impairments and functional limitations, as well as to direct referral of the survivor to the interdisciplinary rehabilitation care team, physical therapy, or community-based exercise.

<table>
<thead>
<tr>
<th>CIPN Severity</th>
<th>Recommendation</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild to</td>
<td>Referral to</td>
<td>Baseline assessment and monitoring of condition as needed</td>
</tr>
<tr>
<td>moderate</td>
<td>physical therapy</td>
<td>Advise survivor on proper footwear and the need to inspect feet regularly.</td>
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<tr>
<td></td>
<td></td>
<td>Education on safe exercise: Avoid surfaces that may increase risk of falls such as treadmill, walking on trails, or uneven surfaces; use elastic bands, tubing, and Velcro® weights instead of free weights.</td>
</tr>
<tr>
<td>Moderate to</td>
<td>Referral to</td>
<td>Physical therapy intervention to address any symptoms of pain and weakness (e.g., transcutaneous nerve stimulation or acupuncture)</td>
</tr>
<tr>
<td>severe</td>
<td>interdisciplinary care team</td>
<td>Prescription of therapeutic exercises for small muscles of the hands and feet (intrinsic muscles) and balance retraining.</td>
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<td></td>
<td></td>
<td>Survivor should be advised to protect extremities from extremes of hot and cold when exercising outdoors.</td>
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<tr>
<td></td>
<td></td>
<td>To prevent dizziness, the exercise regimen should avoid repeated position changes from lying to standing.</td>
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</tbody>
</table>

**Note.** Based on information from Stubblefield, 2011; Stubblefield et al., 2012; Visovsky, 2003.
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