Cancer Rehabilitation: An Expanding Need

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Survival rates for patients with many different types of cancers have improved dramatically over the past few decades. In order to achieve such excellent outcomes many patients receive aggressive treatment including surgery, chemotherapy and radiation therapy. Nonetheless their underlying disease processes as well as the therapeutic interventions they undergo often create functional deficits that limit quality of life, financial stability and the ability to meet social and family obligations. These impairments have been shown to persist even in patients whose cancers have been controlled and who are said to be disease-free.[1] Although the relative overall 5-year survival rate for all cancers now exceeds 65% the "cure" rate remains much lower.[2] This means that large numbers of patients require not just surveillance but repeated oncologic interventions over time, interventions that may further impact functional performance.

The transformation of cancer from death sentence to chronic disease has made health care practitioners and patients more aware of the need to attend to functional and quality-of-life issues. Rehabilitation medicine specialists have responded by developing new models of cancer rehabilitation that preserve and promote function during all phases of disease and treatment.[3] Many nationally recognized cancer centers including M. D. Anderson and Memorial Sloan Kettering, house robust departments of Physical Medicine and Rehabilitation that provide clinical services as well as research initiatives.

Cancer rehabilitation services can be effectively introduced in a variety of institutional settings. They can be initiated through consultation requests for patients in acute care hospitals, they can be provided during inpatient rehabilitation stays, and they can be obtained in outpatient rehabilitation medicine clinics or by including physiatrists in interdisciplinary clinics organized around specific diagnoses. Several studies have shown improved functional outcomes and high levels of patient satisfaction following rehabilitation interventions in each of these milieus.[4,5,6] For example, patients with primary as well as metastatic brain tumors who participated in an inpatient rehabilitation program made and maintained gains in Functional Independence Measure (FIM) scores that matched those made by traditional rehabilitation candidates.[7] Patients with significant disability from oncologic spinal cord compression have also been shown to ben-

efit from inpatient rehabilitation.[8] Considerable data from bone marrow transplant units has proven the safety and benefit of aerobic exercise for this population so convincingly that exercise protocols are now an expected component of treatment plans. Specific interventions for lymphedema that develops after node dissection or speech therapy after laryngectomy are other examples of the broad range of services that help restore and maintain function following cancer treatment. Algorithms for addressing cancer related fatigue (CRF) have been developed by the National Comprehensive Cancer Network.

A significant challenge to any model for delivering cancer rehabilitation services results from an ongoing dialectic between a symptom-based approach and a disease-based approach. Certain problems including pain; cachexia; fatigue; reduced range of motion; deficits in activities of daily living; impaired mobility; or complications from chemotherapy or radiation occur with many different cancer diagnoses and a standardized approach to assessment and intervention may be efficacious.

Implementation, however, may be determined by the specific diagnosis and treatment such as the selection of transdermal administration of pain medication for a head and neck cancer patient with severe dysphagia. Specific tumors are also associated with more rapid or indolent progression, which needs to be taken into account when selecting interventions or rehabilitation goals. Specificity of oncologic diagnosis and staging also determines treatment protocols and the resulting side effects and anticipated impairments. Familiarity with the oncologic continuum of care for specific diagnoses is essential for physiatrists committed to designing optimal rehabilitation programs for cancer patients and speaks to the importance of having medically trained leadership for cancer rehabilitation programs. Pertinent medical information needs to be disseminated to the entire interdisciplinary treatment team, ensuring patient safety and appropriate and realistic support for patients transitioning through different phases of the disease continuum.

The Department of Rehabilitation Medicine of Thomas Jefferson University is currently expanding its cancer rehabilitation initiative by establishing a dedicated consultation service for hospitalized patients, developing a specialized program for inpatient rehabilitation for patients with cancer diagnoses, pursuing specialized training for physical, occupational, and speech therapists and offering outpatient evaluations for patients during and after their treatment for cancer. These services will help patients maximize the benefits conferred by the state of the art oncologic treatment they are receiving. In doing so they will allow us to meet the challenge described by John F. Kennedy in 1963 when he said that "having added new years to life, our objective must also be to add new life to those years." [9]

References

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