**Improved Outcomes and Palliative Care**

*Can palliative care help patients with hematologic malignancies?*

Palliative care, which aims to alleviate symptoms and improve mood for patients with life-threatening illnesses, is increasingly common for individuals with solid tumors in advanced stages. But such care is rarely prescribed for patients with hematologic malignancies, even though standard hematopoietic cell transplantation (HCT) treatment for such cancers requires some of the highest dose chemotherapy—a course that can result in high symptom burdens and long, taxing hospital stays.¹

This discrepancy exists in part because HCT treatment has curative intent, whereas palliative care has not been traditionally used in populations of patients receiving curative therapy. Although a number of clinical trials have shown that early integration of palliative care into treatment can significantly improve quality of life in patients with solid tumors, no trials have included HCT patients.

Published in the November 2016 issue of *JAMA*, Areej El-Jawahri, MD, director of the bone marrow transplant survivorship program at Massachusetts General Hospital Cancer Center, and her team were able to show that palliative care intervention does improve quality of life and mood for HCT patients and their family members.² In a non-blinded randomized controlled trial, 81 adult patients received inpatient palliative care integrated with transplant care for HCT, and 79 patients received only standard transplant care for HCT. Those receiving the palliative care intervention showed lower anxiety and smaller increases in depression and symptom burden after two weeks. At three months post HCT treatment, patients who received palliative care had higher quality-of-life scores and fewer symptoms of depression and post-traumatic stress disorder.

“The most surprising finding for us was that palliative care also led to improvement in the longer-term outcomes in the patient population,” says Dr. El-Jawahri. “It suggests that altering the treatment experience may have longer-term impacts.”

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**Conceptual Model of Palliative Care Intervention on Reported Outcomes**

Palliative care interventions can influence the well-being of both patients and family caregivers, which then creates a feedback loop that influences long-term quality-of-life outcomes.
**Palliative Care Intervention vs. Control**

Researchers measured patient quality of life, depression, anxiety and symptom burden using a variety of assessment tools. In models adjusting for baseline scores, the researchers found that palliative care intervention was strongly associated with higher quality of life and decreased depression, anxiety, fatigue and symptom burden after two weeks. After three months, adjusting for baseline scores, intervention was significantly associated with higher quality of life and decreased depression.

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**DESIGNING INTERVENTIONS**

Palliative care interventions can vary in substance depending on the palliative care clinician, the patient, the setting and the resources available. To provide a standard baseline, Dr. El-Jawahri and her colleagues outlined a set of practices for specialists to follow with research participants throughout the study period. The focus was on managing physical and psychological symptoms during hospitalization for HCT and did not include advance care planning, goals of care, or end-of-life decision-making.

The manual for care provided guidelines for addressing nausea, pain and mucositis, as well as fatigue, insomnia, bowel troubles and psychological distress, with both pharmacological and behavioral interventions. The recommended practices were based on a review of the literature, findings from research on the experience of HCT patients, and counsel from palliative care clinicians. Intervention patients each received at least four palliative care visits during their hospitalizations, which averaged 20 days in duration.

**MEASURING OUTCOMES**

Patients’ symptoms and psychological well-being were measured using a number of different assessments, including a 47-item Functional Assessment of Cancer Therapy-BMT (FACT-BMT) and the 13-item FACT-fatigue subscale. Adjusting for...
baseline scores, researchers found that palliative care intervention was strongly associated with higher quality of life and decreased depression, anxiety, fatigue and symptom burden after two weeks. After three months, intervention was significantly associated with higher quality of life and decreased symptoms of depression and post-traumatic stress disorder. Caregivers of intervention patients, meanwhile, reported less increase in their own depression symptoms at week two, as well as improvement in some aspects of their quality of life, such as coping, and administrative and finances.

According to Dr. El-Jawahri, the study faced several limitations, perhaps the most critical being that intervention and control patients shared a single hospital wing. Dr. El-Jawahri and her colleagues worried that oncologists and nurses treating the control patients might be influenced by the palliative care clinicians working with the intervention group. Differences between the two groups, however, remained significant.

“Our next step is to ensure the generalizability of these findings in larger multicenter studies,” says Dr. El-Jawahri, adding that this also includes looking at patient sets with broader racial and ethnic diversity than the trial group. “We also need to examine in more detail the specific interventions instituted by palliative care that is mediating the improvement in these outcomes.” By exploring the specifics of each intervention, they can also look for ways to further disseminate these approaches in the care of patients undergoing HCT, as well as other patients with hematologic malignancies, especially those with high symptom burdens.