cancer and 16% of colon cancer patients exceeding these time points. The more interesting question is whether it is beneficial to start earlier, such as within 4 to 6 weeks after surgery."

"It is unlikely that most patients could start treatment much before 4 weeks, given the need to recover from surgery and complete the pathologic assessment, which increasingly includes complex biomarker-based studies," adds Dr. Yu. "There is no suggestion that it is deleterious to start sooner rather than later if the patient’s condition allows, so all things being equal, we should strive to start sooner in my opinion."

Dr. Yu also points out that a related operational challenge is how to optimize workflow to permit the earlier initiation of chemotherapy. Improved communication and coordination between multidisciplinary specialists and patient education are essential, he says.

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Structured Palliative Care Program Found to Be Helpful for Caregivers of Patients With Lung Cancer

It is recognized that family (or friend) caregivers (FCGs) of patients with cancer undergo significant stress. Multiple past studies have shown that caregivers experience such negative effects as psychological distress, relationship disruptions, erosion of well-being, and even a higher incidence of cardiac diseases. Despite all this, FCGs are largely ignored by support services. For these reasons, a study was initiated to help provide evidence-based models to support FCGs of patients with lung cancer (Cancer. 2015;121:3737-3745).

"Family caregivers are providing the majority of informal care for cancer patients in the community," says Virginia Sun, RN, PhD, the current study’s lead author and assistant professor in the department of population sciences at the City of Hope Comprehensive Cancer Center in Duarte, California. “There is an urgent need for interventions to support family caregivers in the caregiving role and their own physical, psychological, social, and spiritual needs. Our intervention can serve as an effective and replicable palliative care model for family caregivers of lung cancer patients."

Dr. Sun and her colleagues performed a 2-group prospective study at their institution. Between November 2009 and December 2010, FCGs were enrolled in the usual-care group. FCGs in the palliative care intervention arm were enrolled between July 2011 and August 2014.

FCG quality of life (QOL) was obtained using a validated tool that measures QOL in the domains of physical, psychological, social, and spiritual well-being. Caregiver burden was assessed using a tool that measures caregiving impact on 3 aspects of burden: objective burden, subjective demand, and subjective stress. A caregiver skills preparedness scale was also employed. Patients’ QOL and symptoms were measured using the Functional Assessment of Cancer Therapy-Lung tool, which measures physical, social, emotional, and functional well-being. After the baseline assessment, follow-up questionnaires were administered to FCGs at 7 weeks and 12 weeks.

Patients with non-small cell lung cancer of any stage were enrolled, and they identified a FCG who was also enrolled. A total of 157 FCGs in the usual-care group and 197 in the intervention group were included in the primary outcome analysis.

In the intervention arm, a personalized palliative care plan was devised based on the results of the initial comprehensive QOL assessment. These patients and FCGs were also presented at weekly multidisciplinary care meetings at which recommendations were made concerning ways to support them. In addition, these

KEY POINTS
- A structured and personalized palliative care intervention is feasible to implement among caregivers of patients with lung cancer.
- A palliative care program for caregivers provided improvements in their social well-being and reduced psychological distress as well as decreased caregiver burden and perceived disruption of their life.
- Further research to broaden the caregiver palliative care program to other tumor types and community settings is needed.
FCGs received 4 educational sessions addressing QOL issues.

Results
Multivariate analysis of QOL and psychological distress indicated that FCGs in the intervention group had significantly improved QOL in the social well-being domain and significantly lower psychological distress compared with the usual-care group. In terms of spiritual well-being, FCGs in the usual-care group had significantly higher QOL compared with the intervention group. None of these results was found to differ by the patient’s stage of disease.

Differences were also noted between caregiver burden scores for the 2 FCG arms. The intervention group reported significantly fewer problems with objective burden or perceived disruption of their life. In comparison with the usual-care group, the intervention group also had significantly fewer FCGs with elevated subjective stress (13% vs 24%; \( P = .008 \)). There were no associations found between the 2 groups with regard to subjective demand, defined as the extent to which the FCG perceives care responsibilities to be overly demanding. In addition, no significant differences were noted between groups with regard to caregiver skills preparedness.

“This is an important study as it is the first that I know of to assess the impact of a palliative care support intervention on both the patient and their family,” says Diane Meier, MD, professor of geriatrics and palliative medicine at Mount Sinai Hospital in New York City, who was not involved in this study. “The findings show clear benefit of an added layer of palliative care support in terms of key caregiver outcomes.”

Clinical Implications
The authors noted that this study produces a model for components of an FCG palliative care program. Comprehensive QOL assessments and multidisciplinary recommendations based on the individual assessment for patients and FCGs as a team and supporting educational sessions for FCGs can provide a personalized approach. Based on the current results, these interventions can result in better social QOL and less psychological distress and caregiver burden. No differences were observed between the groups with regard to the FCGs’ physical or psychological QOL or preparedness. The authors believe the short 12-week follow-up may have contributed to this finding.

Furthermore, the finding that spiritual QOL was significantly improved in the usual-care group compared with the intervention group may have indicated that this subject was not covered enough and that a future study may help to clarify how to provide beneficial interventions.

The authors conclude that studies concerning the long-term effects of FCG interventions, as well as generalizing them to other cancer diagnoses and in community practices, are needed.

“The intervention is structured, standardized, and potentially generalizable to other settings,” says Dr. Meier. “I don’t see why this could not be done in a community setting with properly trained and designated staff. I am not aware of other comparable models being used in the community setting, but I think this is primarily due to scarce resources, not lack of need.”

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