When in doubt ... ask the patient: Patient-reported measures and prognosis in esophageal cancer

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The choice of therapy for locally advanced esophageal cancer is often a difficult one for patients and providers. Despite available objective data, treatment decisions are often influenced by factors such as patient motivation, symptom burden, treatment goals, or social and emotional concerns, none of which are incorporated into prognostic models. Performance of validated health-related quality of life (HRQOL) measures before the initiation of therapy may provide a method of incorporating some of these otherwise unmeasured variables into the evaluation of patients with esophageal cancer.

In their article in this issue of the *Journal*, Kidane and colleagues¹ expand on the utility of validated HRQOL instruments in the evaluation of patients with esophageal cancer. The authors used data from 4 prospective trials involving patients with esophageal cancer for whom HRQOL measurements (Functional Assessment of Cancer Therapy–Esophagus [FACT-E]) were obtained before the initiation of any therapy. One hundred seventy-two patients with stage II or III disease were treated with curative intent and included in the primary analysis. Kidane and colleagues¹ concluded that in these patients, higher baseline HRQOL scores were associated with an improvement in overall survival.

The evaluation of HRQOL is often fraught with inconsistencies in collection and incomplete data, leading to bias. A definite strength of this article is the uniform completion of the baseline FACT-E instrument in the setting of prospective clinical trials. Kidane and colleagues¹ performed thorough statistical analyses evaluating the HRQOL score in 3 ways: as a continuous variable, a dichotomous variable, and by quartiles. They also performed a number of sensitivity analyses to address the robustness of their models. Furthermore, the multi-variable logistic regression models included only data available prior to treatment decisions, making these models more applicable to actual clinical decision making than similar models using data gained later in the clinical process.

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Central Message

Baseline health-related quality of life is associated with overall survival in locally advanced esophageal cancer. This association appears to be driven predominantly by esophageal symptomatology.

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It is striking that stage was not associated with survival in this study! The authors appropriately address this concern in their discussion section. The lack of association is likely due to the inclusion of only stage II and III patients in the primary analysis, as well as the fact that the study was not powered to detect a difference in survival based on stage. The inclusion of clinical stage for nonsurgical patients, while pathologic stage was used for those who underwent resection, further complicates any association between outcome and stage. Another limitation of the study is the fact that data were collected over an 18-year period in which significant advances have been made in the realms of medical oncology, radiation oncology, surgery, and endoscopic techniques.

The HRQOL instrument that was used in this article is the FACT-E. Previous studies^{2,3} have linked baseline HRQOL with survival in esophageal cancer, but these studies have used only global HRQOL instruments. The FACT-E instrument consists of a general instrument covering physical, functional, social, and emotional domains with the addition of a specific esophageal cancer subscale (ECS).⁴ The ECS includes 17 items focused on eating, swallowing, enjoyment of food, and a number of other upper aerodigestive tract symptoms. Kidane and colleagues¹ used multivariate modeling to detect a significant

independent association between baseline FACT-E score and overall survival after adjustments for age, stage, histologic type, and therapy received. In addition, they performed the same models with only the esophageal cancer-specific ECS and found an even stronger association with survival and improved model performance.

The stronger association between the ECS and survival suggests that the relationship between the broader FACT-E and survival is driven primarily by patients' esophageal symptoms. This brings up the question of whether the FACT-E and ECS scores are really serving as a proxy for T-stage or esophageal tumor burden. Assessment of the other component scales of the FACT-E would be of interest to determine the degree to which functional, social, emotional, and overall physical well-being are associated with survival.

This article represents an important addition to the literature on locally advanced esophageal cancer. Associations between baseline quality of life and survival suggest that these assessments can be used to help inform patient

decision making in the clinical setting. There is an old adage that says, "when in doubt ... ask the patient." Perhaps encouraging and facilitating communication through routine use of patient-reported HRQOL instruments will allow us to better help patients make difficult treatment decisions.

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