entity. There are 4.6 million people in the United States with heart failure today, and 550,000 new cases are being reported annually by the American Heart Association.⁵ Approximately 30% to 50% of patients with heart failure have a normal or nearly normal left ventricular ejection fraction.⁶ CHF is a leading cause of cardiac morbidity and mortality from cardiovascular disease. Although left ventricular diastolic dysfunction occurs in all patients with systolic dysfunction and CHF, a third of patients have CHF with isolated diastolic dysfunction. In the general population, the mortality among patients with diastolic heart failure is 4 times that among persons without heart failure but half that among patients with systolic heart failure. It is widely known that many physicians underappreciate diastolic function in heart failure.

Reinterpreting the data in the context of the discussion asks for other explanations. In the present era of advancements in echocardiography, diastolic dysfunction needs to be taken into consideration, especially when symptoms of congestive heart failure are present. If that is the case in this study, left ventricular dysfunction remains a predictor of outcome but with a change from systolic to diastolic. Finally, I ask Davierwala and colleagues to take a second look at their data in the light of this forgotten predictor variable. I would appreciate their feedback.

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Reply to the Editor:

Dr Shuhaiber correctly points out that left ventricular (LV) diastolic dysfunction is frequently superimposed on either normal or reduced systolic function in patients undergoing coronary artery bypass grafting. The importance of diastolic dysfunction in the development and progression of congestive heart failure (CHF) has been illustrated previously¹ and is highlighted by the divergent trends in the prevalence of LV systolic dysfunction and CHF in the series on which we reported. Early echocardiographic signs of impaired LV relaxation include decreased early transmitral LV filling and greater dependence on atrial contraction.² Pseudonormalization of LV filling is observed as LV stiffness and left atrial pressures continue to increase, and finally severe diastolic dysfunction is marked by rapid early filling, extreme LV stiffness, and elevated diastolic pressures. This diastolic dysfunction has been shown to predict outcomes in patients with CHF independently of systolic function.³

Despite this, echocardiographic characterization and quantitation of LV diastolic dysfunction is not performed and recorded for all patients undergoing coronary surgery. This may be due in part to logistical issues and in part to underappreciation of its prognostic significance. Like systolic function, diastolic function may also vary significantly with time in patients with intermittent ischemia or a maturing myocardial infarction.

Our institutional database, initiated in 1982 and now encompassing approximately 40,000 surgical patients, does not as yet contain uniform data on diastolic function, nor does the much larger Society of Thoracic Surgeons database. Thus, although one may reasonably speculate that the prevalence of diastolic dysfunction in patients undergoing coronary artery bypass grafting is increasing in parallel with other risk factors, as we have reported in this series, our data do not currently permit evaluation of the independent effect of diastolic function on mortality and morbidity. These measures of diastolic dysfunction

will have to be obtained routinely for all patients undergoing surgery and incorporated into institutional and regional databases before we be able to determine whether the decreasing influence of LV systolic dysfunction on outcomes has unmasked relatively more subtle predictors, including CHF and left main stenosis as we have reported or diastolic dysfunction as Dr Shuhaiber suggests.

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Extracapsular lymph node involvement in esophageal cancer and number of involved nodes

To the Editor:

We thank Dr DeMeester¹ for his valuable comments on our article "Extracapsular Lymph Node Involvement Is a Negative Prognostic Factor in T3 Adenocarcinoma of the Distal Esophagus and Gastroesophageal Junction."² We fully agree with Dr DeMeester¹ that the number and characteristics of lymph nodes are very important determinants of survival in esophageal cancer, and we endorse his plea for taking the number of involved nodes into account in the TNM staging system of esophageal cancer.

In his editorial,¹ Dr DeMeester made some points that we would like to clarify. With regard to the survival in patients without nodal involvement versus patients with intracapsular nodal involvement, there was no significant difference in survival. This