with idiopathic cardiomyopathy, but wondered about the generalizability of their conclusions. It seemed likely that their patients' survival would not be statistically different from the survival of patients in whom the only selection criterion was the presence of an ejection fraction of less than 0.25.

To examine this hypothesis, a 5,000-record adult echocardiography data base was used to retrieve 130 records of patients whose mitral E point septal separation (EPSS) [1] was greater than 20 mm. A cutpoint of 20 was selected because prior work had demonstrated the correlation of an EPSS of greater than 20 mm with an ejection fraction less than 0.25 [1]. EPSS was chosen as the inclusion criterion rather than ejection fraction because of the ease of measurement of the EPSS, even in patients in whom echocardiography is not easy to perform. Time zero was the date of echocardiography. Information regarding survival was available for all Miami patients. Possible prognostic variables that we considered were: age, history of coronary artery disease, history of ventricular tachycardia, EPSS dimension, presence of a low cardiac output on two-dimensional echocardiography [2], and presence of aortic regurgitation by pulsed Doppler echocardiography. Since three of Stevenson et al's patients were withdrawn for emergency transplant surgery but the time of withdrawal was not reported, we ran our statistical tests twice: first, we assigned three nine-month survivors as "withdrawn from the study," then we re-ran the analysis with the three withdrawn patients listed as "deaths." BMDP statistical software was used. Survival curves were calculated for two groups: Stevenson et al's patients, and Miami patients. Cumulative survival was calculated by the life-table method. Breslow's version of the generalized Wilcoxon statistic was computed to test the equality of survival curves of the two groups of patients. The correlates of survival in Miami patients were assessed via Cox survival analysis. A p value <0.05 was defined as statistically significant.

The results showed that survival curves for the two groups of patients were not significantly different from each other, although there was a trend, albeit not statistically significant, for shorter survival in Stevenson et al's patients beyond three months. The results were unchanged whether we coded the three emergency transplant recipients as withdrawn or dead. In Miami patients, the only variable significantly related to survival was the age of the patient, such that the relative risk of death for a 50-year-old patient was 1.8 times that of a 30-year-old patient, and the relative risk of death for a 70-year-old patient was 3.4 times that of a 30-year-old patient. Age was not analyzed by Stevenson et al, but unless there was a very narrow range of age in their patients, age would likely be an important prognostic factor in their patients also.

These data suggest: (1) survival in Stevenson et al's patients was not significantly different from that in Miami patients, (2) Miami patients represented a broad cross-section of patients with very poor left ventricular systolic function, and (3) since relative risk increases sharply with age in such patients, consideration should be given to further relaxing the upper age limit for cardiac transplantation.

EVLIN L. KINNEY, M.D.
University of Miami
School of Medicine and
The Reed Institute
Miami, Florida 33140-0603

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The Reply:

It is interesting that Dr. Kinney has found a survival curve similar to ours in his patients with E-point septal separation (EPSS) of 20 mm or greater. However, his population was slightly different than ours. Although increased E-point septal separation, after exclusion of mitral stenosis and aortic insufficiency, has correlated well with angiographic ejection fraction for a heterogeneous population, only nine patients in that study had EPSS of 20 mm or more, five of whom had ejection fraction of more than 25 percent [1]. Although severity of illness may thus have been lower in Dr. Kinney's group, the comparable mortality may be due to his inclusion of a large number of older patients, as he suggests. At the time of our study, the upper age limit for cardiac transplantation referral ranged from 55 to 60 years. We did include age in our Cox regression and it did not predict survival, hemodynamic failure, or sudden death.

We agree that the upper age limit for cardiac transplantation should be liberalized. The University of Arizona has shown good survival in patients over 50 [2] and we have accepted five patients over 60 years, who have done well. However, some factors that influence mortality of older patients may be noncardiac and must be carefully investigated prior to selection for transplantation.

LYNNE WARNER STEVENSON, M.D.
University of California, Los Angeles
Los Angeles, California 90024-1736

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FINE NEEDLE ASPIRATION OF THE THYROID

To the Editor:

We fully agree with the conclusions of Asp et al (Am J Med 1987; 83: 489–493) regarding the feasibility of fine needle aspiration of the thyroid (FNA) in an average health care facility. In our own initial experience with 183 patients studied over a period of five years (Liel Y, Zirkin HJ, Sobel RJ: Fine needle aspiration of the thyroid. Five years' experi-