Commentary: Septal reduction therapy: The sooner, the better?

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What is the impact of early septal reduction therapy (SRT) on patients with obstructive hypertrophic cardiomyopathy (HCM)? In this issue of the Journal, Cui and colleagues present a study of 1351 patients with obstructive HCM evaluated at the Mayo Clinic from 2000 to 2012. Early SRT, defined as septal myectomy (SM) or alcohol septal ablation (ASA) within 6 months of index evaluation, was performed in 884 patients (65.4%), whereas 467 patients (34.6%) were initially treated medically. Follow-up starting at the 6-month landmark point as “time zero” continued for 15 years (median, 10 years), with mortality the primary endpoint.

The most striking finding, clearly illustrated in the article’s central picture, is that early SRT provides a survival benefit compared with medical treatment. This difference was even more pronounced after the patients were risk-adjusted for age and comorbidities. There was heterogeneity of treatment effect, with increased benefit of early SRT in women, patients in New York Heart Association class III-IV, and nondiabetics.

There are some limitations to the study, in that it is a retrospective, nonrandomized study at a tertiary referral center that performs SRT with excellent outcomes and thus might not be applicable to all institutions. It is important to note that “early” refers to the course of management and not to the disease stage. Patients with HCM may be diagnosed at various points in the disease process, some by screening and others by clinical presentation. They may be referred at varied points after diagnosis, making time from referral rather than time from diagnosis an appropriate basis for the study’s design. The patients in this study are highly selected, having been referred to a tertiary care center for treatment, and the results of this study cannot be generalized to all patients diagnosed with obstructive HCM.

Septal myectomy is safe and effectively eliminates outflow tract obstruction in HCM, providing excellent relief of heart failure symptoms. Alcohol septal ablation is a viable alternative to SM for many patients, especially those at high surgical risk. However, current guidelines, based on...
data from an earlier era when the risk of invasive therapy was higher, support medical management as primary therapy and recommend reserving SRT for patients refractory to medical therapy. Some experts have suggested that given the low procedural risk at experienced centers and predictable relief of symptoms with surgery that septal myectomy should be considered earlier in the management of obstructive HCM. This study suggests that a strategy of earlier intervention not only may provide better symptom relief, but also may improve long-term survival. Although this is not a randomized prospective study, which would not be feasible in this patient population, it is well designed and executed, with good statistical support for its conclusions. If the results are confirmed at other institutions, it could lead to a shift in the paradigm for management of obstructive HCM toward a strategy of earlier intervention.

References