

**Harvard Medical School Department of
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Division of the Department of Medicine,
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Cardiology Rounds
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Alcohol septal ablation for hypertrophic obstructive cardiomyopathy

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Objectives: Hypertrophic obstructive cardiomyopathy (HOCM) represents a major component of the genetic cardiomyopathies. Although basic investigators have discovered several distinct genotypes that produce HOCM (see *Cardiology Rounds* August/September 2000, *The genetic basis of hypertrophic cardiomyopathy* by Dr. Christine Seidman), the treating physician deals with the resultant phenotype. As such, clinical management concerns include the augmented risk of sudden death and the development of symptoms generally attributed to dynamic outflow tract obstruction. The basis of medical therapy has been the use of beta-blockers and calcium channel blockers, either alone or in combination, to reduce symptoms attributed to the dynamic gradients produced across the aortic outflow tract. Unfortunately, many patients remain symptomatic despite combinations of medical therapies. In this issue of *Cardiology Rounds*, Dr. Michael Fifer shares his extensive experience with a new interventional approach to treat patients who remain limited by symptoms despite medical therapy. He provides our readers with the rationale for using an infusion of alcohol into the septal perforating branch coronary artery to produce a "controlled" infarct in a highly localized region. The reader will gain a better understanding of the rationale for using this procedure, the key aspects of patient selection, some interesting technical aspects regarding the procedure itself, as well as the success and complication rates. A summary of the overall experience of his active laboratory will help readers put into perspective how best to use this novel approach for treating patients who remain symptomatic from HOCM despite medical therapy.

TEST:

1. Infusion of alcohol into the septal branch of the coronary artery in patients with HOCM is offered to selected patients to prolong survival.
True False

2. Alcohol septal ablation produces a "controlled" myocardial infarction with elevations in cardiac markers. The complications of this procedure include:
 - a. Risk of heart block requiring permanent pacing
 - b. Coronary dissection
 - c. Fatal ventricular fibrillation
 - d. Ventricular septal rupture
 - e. All of the above

3. Pre-alcohol infusion use of myocardial contrast echo has been helpful in definitively determining the precise area that the particular septal branch supplies.
True False
4. The best criterion with which to judge the long-term success of alcohol septal ablation is the change in gradient.
True False
5. The overall objective of the procedure is the long-term reduction of symptoms.
True False
6. Alcohol septal ablation should be considered as an alternative to surgical septal myectomy.
True False
7. Alcohol septal ablation of hypertrophic obstructive cardiomyopathy reduces risk of sudden death.
True False

To receive AMA category 1 credit, you must correctly answer 60% of the test questions.

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