



Lecture Notes

American College of Cardiology 60th Annual Scientific Session & i2 Summit

Influence of Myocardial Viability on Outcome of Patients with CAD and LV Function Undergoing Medical Therapy with and without Surgical Revascularization: Results of the Surgical Treatment for Ischemic Heart Failure Trial

Study Sponsor: National Heart, Lung, and Blood Institute

Clinical Trial #: NCT00023595

Summary

To determine whether myocardial viability in patients with coronary artery disease (CAD) and left ventricular (LV) dysfunction confers a survival benefit in coronary-artery bypass grafting (CABG).

Study Design

- Multicenter, nonblinded, randomized trial
- Substudy of the STICH Trial
- n=601 patients with CAD and LV dysfunction enrolled in the STICH trial
- Use of single-photon-emission computed tomography (SPECT), dobutamine echocardiography, or both to assess myocardial viability on the basis of prespecified thresholds

Results

- 298 patients received medical therapy plus CABG
- 303 patients received medical therapy alone
- 178 of 487 (37%) patients with viable myocardium died (HR, 0.64; 95% CI, 0.48 to 0.86; p=0.003)
- 58 of 114 (51%) patients without viable myocardium died
- After adjustment for other baseline variables, the association between viable myocardium and mortality was not significant (p=0.21)

Conclusions

The assessment of myocardial viability did not identify patients with a greater likelihood of survival after CABG compared with medical therapy alone.

Further Reading

Bonow RQ. *N Engl J Med* 2011