Ventricular Restoration Aids Ischemic Cardiomyopathy

Patients with ischemic Cardiomyopathy and increased ventricular volume who undergo surgical ventricular restoration in addition to coronary artery bypass grafting were found to do better on several outcome measures than did patients who undergo bypass alone.

That’s the result of a case control study by R. B. Prucz, a medical student at Johns Hopkins University, Baltimore, Md., who worked with Dr. Eric S. Weiss, Dr. J. V. Conte, and several other investigators from the university. The researchers presented their results at the annual meeting of the Society for Thoracic Surgeons in Ft. Lauderdale, Fla.

The patients who underwent surgical ventricular restoration (SVR) in addition to coronary artery bypass grafting (CABG) showed no early survival advantage over patients undergoing CABG alone. But the combined procedure was associated with fewer rehospitalizations and more significant improvements in New York Heart Association (NYHA) heart failure classification.

The study included 120 patients with ischemic Cardiomyopathy (ICM) and ejection fractions of 35% or less. As judged by ventriculogram or electrocardiogram, all patients met the criteria for the combined SVR-CABG procedure. Of those, 58 underwent CABG alone and 62 underwent combined SVR-CABG.

There were no statistical differences seen in operative mortality (6.4% for SVR-CABG vs. 5.2% for CABG alone) or in postoperative ejection fraction (34% vs. 32%).

But SVR-CABG patients were much less likely to be rehospitalized for heart failure (24% vs. 55%). And 80% of the SVR-CABG patients improved to NYHA class I/II, compared with only 57% of the patients who underwent CABG alone. There was also a trend, which did not reach statistical significance, toward improved 4-year survival in the SVR-CABG patients.

“The results of this study demonstrate what we have always believed to be true, and that is that the SVR procedure offers added clinical benefit to eligible individuals when compared to bypass grafting alone,” Dr. Conte said in an interview.

The investigators concluded that the combined procedure should be offered to eligible patients with ischemic Cardiomyopathy and ventricular enlargement.

– Robert Finn