Mitral-Valve Replacement Equals Repair in Some

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WASHINGTON — Mitral-valve replacement can work as well as repair in a very select group—older patients with a more complex valvular pathology—based on a review of 195 matched patients.

"We still believe that mitral-valve repair is the procedure of choice, in younger patients with posterior prolapse," Dr. A. Marc Gillinov said at the annual meeting of the American Association for Thoracic Surgery. And "if a valve is repairable we repair it," regardless of the patient's age, the degree of valve calcification, or the type of prolapse, said Dr. Gillinov, a cardiac surgeon and surgical director of the center for atrial fibrillation at the Cleveland Clinic.

But "a good replacement is better than a bad repair," he said.

The message from these results is that "mitral-valve repair remains the treatment of choice for about 90% of patients with defective valves. But for the approximately 10% of patients whose valve disease is complicated and who have comorbidities, mitral-valve replacement doesn't appear to compromise survival," said Dr. Bruce W. Lytle, chairman of thoracic and cardiovascular surgery at the Cleveland Clinic.

The study began by reviewing 3,051 patients who underwent mitral valve repair and 235 who had valve replacement for isolated, degenerative mitral disease at the Cleveland Clinic from January 1985 to January 2005. The review showed that replacement surgery tended to be used on patients who were older and had left ventricular dysfunction, valve calcification, and an anterior or bileaflet prolapse. Fifteen-year survival rates were about 70% for patients who had repair compared with about 35% in patients with replaced valves.

To assess survival rates in comparable patients, Dr. Gillinov and his associates used propensity matching to identify 195 of the patients who underwent valve repair whose clinical, demographic, and valve characteristics at the time of repair closely matched a paired patient from the replacement group. The 15-year survival rate in these 195 matched pairs of patients was very similar in each of the treatment groups, about 40%, Dr. Gillinov said. ■

Quit Smoking After CABG, Gain 3 Years

NEW ORLEANS — Patients who quit smoking within a year after coronary artery bypass graft surgery prolong their life expectancy by an average of 3 years, Dr. Don Poldermans said at the annual meeting of the American College of Cardiology.

"This [information] is a practical tool for physicians to use. … It may be the ultimate reason for the patient to quit smoking," observed Dr. Poldermans of Erasmus University, Rotterdam, the Netherlands.

He reported on 30-year outcomes for 1,041 consecutive patients who underwent venous CABG at the medical center in 1971-1980: 551 were smokers at the time, of whom 43% quit within the next year.

The 10-year survival was 88% in the smoking cessation group, compared with 77% in the persistent smokers. Survival at 15 and 30 years was 70% and 19%, respectively, in the patients who had quit smoking, compared with 53% and 11% in those who did not. The average life expectancy was 20 years for patients who quit smoking and 17 years for persistent smokers.

Smokers younger than 50 years at the time of CABG and who quit smoking within the next year lived an average of 3.5 years longer than did those who kept smoking. Patients age 50-60 years at surgery and who ceased smoking gained an average of 2.8 years, compared with persistent smokers. Those who quit following CABG after age 60 had a 1.7-year greater life expectancy than did those who didn't quit.

Dr. Poldermans said that these are conservative estimates of the life expectancy benefit of smoking cessation because they derive from the early era of CABG, in which it was largely reserved for relatively young, otherwise healthy patients of a sort that cardiac surgeons seldom encounter today. Today's CABG patients are much sicker, older, and higher risk than were those of 30 years ago—and the greater a patient's risk, the greater the benefit of an effective intervention.

—Bruce Jancin