β-Blocker May Raise Aortic Regurgitation Survival

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CHICAGO — Treatment with a β-blocker may enhance survival in patients with severe aortic regurgitation, based on a retrospective review of 756 patients from one center.

Conventional wisdom has counseled against treating aortic-regurgitation patients with a β-adrenergic receptor antagonist, out of concern that a slowed heart rate will increase the duration of diastole, which is when regurgitation occurs, Dr. Unnati Sampat and her associates said in a poster presented at the annual meeting of the American College of Cardiology.

Despite this, of the 756 patients with severe aortic regurgitation seen at Loma Linda (Calif.) University Medical Center during 1993-2007, 47% were treated with a β-blocker. The contrarian rationale for β-blocker treatment is that because aortic regurgitation produces neuroendocrine activation similar to heart failure, treatment with a β-blocker may be beneficial.

The average age of all the regurgitation patients was 61 years, and 59% were men.

During a mean follow-up of 4.5 years, treatment with a β-blocker was associated with better survival. After the first year of follow-up, survival was 90% in the patients on a β-blocker, compared with a 75% survival rate among the other patients. By the end of 5 years of follow-up, 70% of patients on β-blockers were still alive, compared with 55% of patients not on a β-blocker.

In a multivariate analysis that controlled for demographics, comorbidities, and baseline treatments, treatment with a β-blocker cut the risk of death in regurgitation by about 25%, a statistically significant effect, reported Dr. Sampat, a cardiology researcher at Loma Linda, and her associates. ■

Paroxetine Not Tied to Cardiac Malformations

MONTEREY, CALIF. — There is no statistically significant association between paroxetine usage during the first trimester of pregnancy and an increased risk of cardiac malformations in the infants, according to a meta-analysis of nine studies.

A selective serotonin reuptake inhibitor frequently prescribed for depression and anxiety, paroxetine (Paxil) was the subject of a 2005 warning by the Food and Drug Administration and the manufacturer, referencing unpublished findings of cardiac malformations in infants exposed during the first trimester of pregnancy.

Several other studies appeared to confirm these findings, Lisa O'Brien reported in a poster session at the annual meeting of the Teratology Society. And a meta-analysis published in 2007 that included all of the studies published up until that time found that first-trimester paroxetine presented a modest increased risk of cardiac malformations (Clin. Ther. 2007;29:918-26).

Since then, however, Ms. O'Brien of the Hospital for Sick Children, Toronto, and her colleagues identified a total of nine studies that could be included in their analysis—six cohort studies and three case-control studies—which they analyzed separately. The case-control studies together included 30,247 women and, with a summary odds ratio of 1.18, found no statistically significant association between paroxetine and cardiac malformations.

The cohort studies included 66,409 women. The rate of cardiac malformation was 1.14% among the 3,428 infants exposed to paroxetine and 1.09% among the 62,981 controls. The weighted average difference in cardiac malformation rates between the two groups was 0.3%, which the investigators described as small and nonsignificant.

"First-trimester exposure to paroxetine appears not to be associated with an increased risk of cardiac malformations," the investigators concluded.

"This evidence-based information will assist women, together with their physicians and other health care providers, to make an informed decision regarding the use of paroxetine during pregnancy."

The investigators, disclosed that they had no conflicts of interest related to their presentation.

—Robert Finn

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