AF Ablation During CABG Deemed Safe

BY BRUCE JANCIN

FROM THE ANNUAL MEETING OF THE WESTERN THORACIC SURGICAL ASSOCIATION

COLORADO SPRINGS – Adding the Cox Maze III procedure to eliminate persistent or permanent atrial fibrillation in patients presenting for coronary artery bypass graft or aortic valve surgery does not increase operative risk and may improve long-term outcomes, according to a case-control study.

The import of this finding lies in the fact that many surgeons are reluctant to add an atrial fibrillation (AF) procedure on top of what they see as the main event – that is, the CABG and/or aortic valve replacement.

Indeed, roughly 75% of patients with AF who undergo CABG leave the operating room with their persistent AF left untreated, even though European and American studies suggest that such patients have reduced survival, Dr. Niv Ad said at the meeting.

He presented a propensity score–matched, case-control study that showed there was not only no increase in major morbidity as a result of performing an add-on Cox Maze III procedure, but the 5-year survival rate was closely similar to that of control patients without AF undergoing the same types of heart surgery.

"It means that by treating atrial fibrillation and restoring sinus rhythm, we may restore survival," observed Dr. Ad, chief of cardiac surgery and director of cardiac surgery research at Inova Heart and Vascular Institute in Falls Church, Va.

"The Cox Maze III should not be denied because of the perceived increased operative risk in patients in whom the cardiac surgical procedure does not include atriotomies, as it may actually significantly improve their outcome," he said. "With the cardiopulmonary bypass measures we have today and the cardioplegia we have today, I think adding 30-45 minutes of bypass time is not as big a deal as it was 10 years ago."

Dr. Ad presented a retrospective study including 95 patients who underwent CABG and/or aortic valve replacement plus a Cox Maze III procedure to surgically ablate their AF, along with 95 propensity score–matched controls without AF who underwent similar operations without a Maze.

The median length of hospital stay was 6 days in the Maze group and significantly shorter, at 5 days, in controls. The two groups had similarly low rates of major morbidities, including stroke, infection, reoperation for bleeding, renal failure requiring dialysis, and readmission within 30 days. However, 6% of the Maze group required implantation of a pacemaker, compared with none of the controls, a significant difference.

Dr. Ad minimized the import of this finding. "It's not a major morbidity. The patients are otherwise doing fine."

Overall survival through 60 months of follow-up was 88.5% in the Maze group and 87.5% in controls. Quality of life as measured using the Short Form–12 and Health-Related Quality of Life instrument improved to a similarly significant degree in both groups.

Regarding which cardiac surgery patients with AF he thinks are most or least likely to benefit from an add-on Cox Maze III procedure, Dr. Ad said, "Based upon my experience, the sicker the patient the more beneficial the Maze procedure. You can really restore AV synchrony and pacing." ■

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Major Finding: Performing a Cox Maze III procedure to ablate persistent or permanent AF in patients undergoing CABG and/or aortic valve replacement did not increase operative risk. Overall survival through 60 months was 88.5% in the Maze group and 87.5% in control patients without AF undergoing the same types of heart surgery.

Data Source: A retrospective, propensity score–matched, case-control study involving 190 patients undergoing CABG and/or aortic valve replacement, half of whom had atrial fibrillation.

Disclosures: Dr. Ad declared having no financial conflicts.