LIVE CMES IN HOUSTON

Re-Evolution Summit

March 5-7, 2009

Hotel Zaza Houston, TX

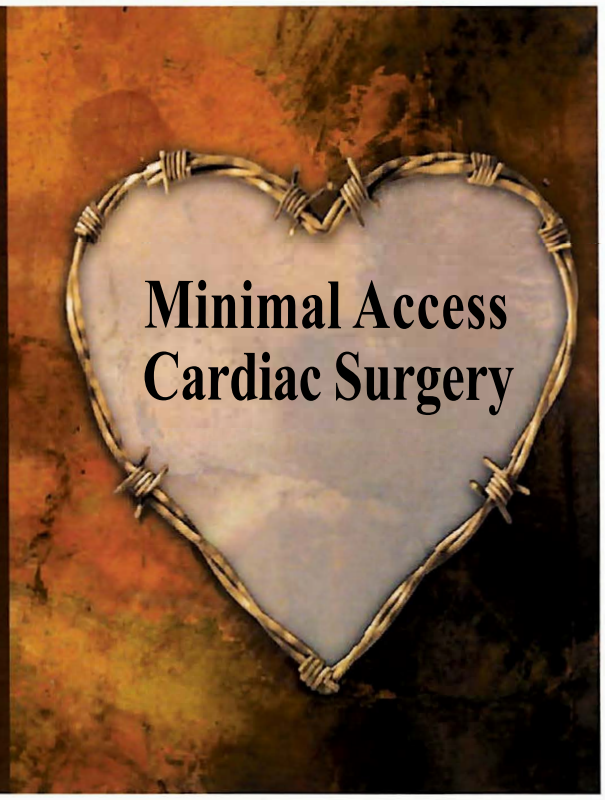
Target Audience: cardiac surgeons, thoracic surgeons, cardiologists, residents and fellows in cardiac and thoracic surgery subspecialties, nurses and nurse practitioners

Course Director: Erik K. Beyer, M.D.

This course is designed to give a comprehensive review of minimally invasive cardiac surgical techniques which have been adopted in a limited number of centers.

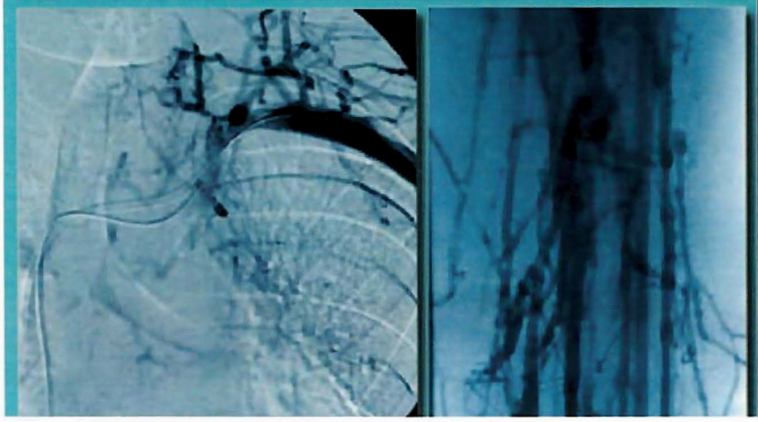
This activity has been approved for AMA PRA Category 1 Credit™.

For more information, contact the Methodist CME office at 713-441-4971.



Total Endovascular Series

VENOUS 1 SYMPOSIUM



March 12-14, 2009

Hotel Za Za, Houston, TX

The conference is designed for cardiovascular surgeons, radiologists, cardiologists, fellows and residents of the above specialties, vascular biologists, and their staff.

For more information and online registration:
www.totalendovascularseries.org
E-mail:
TES@meetingmanagers.com

NEWS

TWO BIOMARKERS IMPROVE PREDICTION OF STROKE RISK

Results from new research conducted at the Methodist DeBakey Heart & Vascular Center in Houston show that two common biomarkers can improve the ability to predict who will suffer from a stroke.

Stroke is the third leading cause of death in the U.S. and a leading cause of disability. Accurate risk assessment is imperative because stroke is preventable with medical therapy and lifestyle changes.

"If we can identify increased risk for stroke, we can recommend, exercise, smoking cessation, and cholesterol and blood pressure medication to reduce a person's risk for stroke by more than 30 percent," said Dr. Vijay Nambi, lead author on the study and cardiologist at the Methodist DeBakey Heart & Vascular Center and Baylor College of Medicine. "Adding these two biomarkers to traditional risk assessment tools improves our ability to do that."

"The study found that adding two biomarkers associated with inflammation, lipoprotein-associated phospholipase A2 (Lp-PLA2) and high-sensitivity C-reactive protein (CAP), to traditional risk factor assessment for stroke changed the risk category in which some patients were placed," said Dr. Christie Ballantyne, director of the Center for Cardiovascular Disease Prevention at the Methodist DeBakey Heart & Vascular Center and Baylor, and senior investigator in the study. "The greatest impact was on patients who, with traditional risk assessment, were placed into the intermediate risk category. With the addition of the biomarkers, Lp-PLA2 and CAP testing, 39 percent of those patients were reclassified into a lower or higher risk group."

Traditional risk factors for stroke include high blood pressure, smoking, high cholesterol, diabetes, obesity and other hereditary factors.

This study was funded by the National Heart, Lung and Blood Institute (NHLBI) and by an unrestricted research grant from GlaxoSmithKline. This was a multi-center study led by investigators at The Methodist Hospital. Lp-PLA2 was measured using the PLAC test provided by diaDexus, Inc.

ABOUT THE STUDY

Data for the current analysis was from the Atherosclerosis Risk in Communities (ARIC) study. The ARIC study is a prospective biracial study of atherosclerotic cardiovascular disease incidence. 15,792 individuals, initially aged 45 to 64 years, were recruited between 1987 and 1989 from four communities in the United States.

In a prospective case cohort (n=949) study in 12,762 apparently healthy, middle-aged men and women in the ARIC study, we first examined whether Lp-PLA2 and hs-CRP levels improved the area under the curve (AUC) of receiver operating characteristic curves for five-year ischemic stroke risk. We then examined how Lp-PLA2 and hs-CRP levels altered classification of individuals into low-, intermediate-, or high-risk categories compared with traditional risk factors.

C-reactive protein and Lp-PLA2 have been associated with stroke in several studies. This new analysis now suggests that these biomarkers modestly improve ischemic stroke risk prediction and offer the most improvement when combined.

As has been seen with the addition of biomarkers in coronary heart disease risk prediction, the intermediate-risk group had the greatest reclassification with approximately 39 percent of the individuals reclassified into lower or higher risk groups. Although approximately 33 percent of the high-risk individuals were reclassified to a lower risk, the overall number of individuals in the high-risk group was very small (only three percent of the total individuals in this study) and furthermore, the majority of reclassified high-risk individuals (approximately 98 percent) were reclassified to the intermediate risk group. Given the known benefits of lifestyle modification and pharmacotherapy in high-risk individuals based on traditional risk factors alone, these individuals should continue to be treated as high risk. Similarly, as expected from studies with other biomarkers and imaging tests, very few low-risk individuals (only four percent of this group) were reclassified, and none were reclassified into the high-risk group. We feel that from a clinical point of view, the measurement of these biomarkers for further stratification of clinical stroke risk should only be considered in individuals who have intermediate risk based on TRF alone (two percent to five percent five-year stroke risk).