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Anesthesiology 2008; 108:769–70

Instructions for Obtaining Journal CME Credit

ANESTHESIOLOGY's journal-based CME program is open to all readers. Members of the American Society of Anesthesiologists participate at a preferred rate, but you need not be an ASA member or a journal subscriber to take part in this CME activity. Please complete the following steps:

1. Read the article by Hammill *et al.* entitled "Impact of heart failure on patients undergoing major noncardiac surgery" on page 559 and the accompanying editorial by Fleisher entitled "Implications of preoperative heart failure: The next frontier in perioperative medicine?" on page 551 of this issue.
2. Review the questions and other required information for CME program completion (published in both the print and online journal).
3. When ready, go to the CME Web site: http://www.asahq.org/journal-cme. Submit your answers, form of payment, and other required information by December 31 of the year following the year of publication.

The American Society of Anesthesiologists is approved by the Accreditation Council for Continuing Medical Education (ACCME) to sponsor continuing medical education programs for physicians.

The American Society of Anesthesiologists designates this educational activity for a maximum of 1 *AMA PRA Category 1 Credit*™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

Purpose: The focus of the journal-based CME program, and the articles chosen for the program, is to educate readers on current developments in the science and clinical practice of the specialty of Anesthesiology.

Target Audience: Physicians and other medical professionals whose medical specialty is the practice of anesthesia.

Learning Objectives: After reading the articles, participants should understand the relative impact of heart failure and coronary artery disease on all-cause operative mortality and 30-day readmission in common noncardiac surgical procedures.

Disclosure Information:

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Grants or research support: Supported by Scientist Development Award No. 0535099N from the American Heart Association, Dallas, Texas (to Dr. Hernandez).
Consultantships or honoraria: None
Authors– Lee A. Fleisher, M.D.
Grants or research support: None
Consultantships or honoraria: None
The article authored by Dr. Fleisher was supported solely from institutional and/or developmental sources.
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Drs. Jameson and Dutton have no grants, research support, or consultant positions, nor do they receive any honoraria from outside sources, which may create conflicts of interest concerning this CME program.

CME *Article Questions*

Based on the article by Hammill *et al.* entitled "Impact of heart failure on patients undergoing major noncardiac surgery" and its accompanying editorial by Fleisher entitled "Implications of preoperative heart failure: The next frontier in perioperative medicine?" in the April issue of ANESTHESIOLOGY, choose the one correct answer for each question:

1. Which of the following statements about the use of large administrative databases containing information extracted from medical insurance claims is *most* likely true?
   A. The data allow assessment of the severity of illness.
   B. The data allow comparison of drug therapies within patient groups prior to surgery.
   C. The large number of patients makes it possible to assess the risk of an uncommon event in a diverse population.
   D. Small changes in outcome (*e.g.*, better blood pressure control) can be reliably used for research.

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2. The study by Hammill *et al*. evaluated outcomes after major noncardiac surgery. Patients were placed in three categories: patients with heart failure, patients with coronary artery disease, and patients without heart failure or coronary artery disease. Which of the following statements about the study design is *most* likely true?
   A. Patients with both heart failure and coronary artery disease were excluded from the study.
   B. Patients with end-stage renal disease were excluded from the study.
   C. Comorbid conditions were not documented.
   D. Mortality was reported only when directly caused by the surgical procedure.

3. In this study, all of the following comorbid conditions increased the risk of operative mortality *except*
   A. Hypertension
   B. Chronic obstructive pulmonary disease
   C. Dementia
   D. History of stroke

4. Which of the following statements about the risk of all-cause operative mortality is *most* likely true?
   A. Patients treated at a teaching hospital were at greater risk than those at a nonteaching hospital.
   B. The risk of mortality in patients with heart failure was more than double the risk of mortality in patients with coronary artery disease.
   C. After adjustment, the risk of mortality in patients with coronary artery disease was more than triple the risk of patients without heart failure or coronary artery disease.
   D. There was increased mortality in all surgical procedures in patients with coronary artery disease compared with patients with heart failure.

5. Which of the following statements about the risk of all-cause 30-day hospital readmission is *most* likely true?
   A. Patients undergoing knee replacement had the highest readmission rate.
   B. Patients with heart failure were at less risk of readmission than patients with coronary artery disease.
   C. Patients with heart failure had more than twice the readmission rate of patients without heart failure or coronary artery disease.
   D. Patients with coronary artery disease were 51% more likely to be readmitted than patients without heart failure or coronary artery disease.

6. To determine the effect of concurrent coronary artery disease on patients in the heart failure category, both subgroups, heart failure alone and heart failure plus coronary artery disease, were compared to the group of patients without either. Which of the following statements about this comparison is *most* likely true?
   A. The risk-adjusted operative mortality was the same for patients with heart failure alone as for patients with both heart failure and coronary artery disease.
   B. The unadjusted risk of 30-day readmission was the same for patients with heart failure alone as for patients with both heart failure and coronary artery disease.
   C. When risk was adjusted for type of procedure, the patients with both heart failure and coronary artery disease had a reduced risk of readmission compared to patients with heart failure alone.
   D. The unadjusted operative mortality was significantly greater for patients with heart failure alone than for patients with both heart failure and coronary artery disease.

All tests and requests for Category 1 credit must be submitted through the ANESTHESIOLOGY CME Web site at http://www.asahq.org/journal-cme. Participants should claim credit, in 15-minute increments, for a maximum of 1 hour of CME credit per journal issue (up to 12 credits per year). Two payment options are available:

Per-year fee: ASA Members $60.00, Non-members $90.00
Per-issue fee: ASA Members $10.00, Non-members $15.00

For either option, participants may pay using VISA or MasterCard.

If you have any questions regarding the ANESTHESIOLOGY continuing medical education program, please contact Ellen M. Bateman, Ed.D., Education Specialist, at (847) 825-5586 or via e-mail at e.bateman@asahq.org.