Evaluation of the Role of Euroscore II in Predicting Early Critical Care Outcome in Off Pump Cardiac Surgery Patients

Thesis

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By
Ahmed Mohamed Elsayed
(M.B., B.Ch.)

Under Supervision of

Prof. Dr. Ayman Nehad MoharramAssociate Professor of Critical Care Medicine Faculty of Medicine - Cairo University

Prof. Dr. Mahmoud Khaled Nour
Associate Professor of Critical Care Medicine
Faculty of Medicine - Cairo University

Dr. Mohamed Amin Fakher
Lecturer of Critical Care Medicine
Faculty of Medicine - Cairo University

Faculty of Medicine Cairo University 2019

Abstract

Introduction: Role of Euroscore II in predicting mortality in on pump CABG is proved, but in off pump CABG it is not well established. This study was designed to evaluate the ability of Euroscore II to predict mortality and morbidity in off pump cardiac surgery patients.

Patients and Methods: In this prospective observational study, 300 patients who underwent off pump CABG were included and subjected to history taking, clinical examination, imaging and laboratory investigations, Euroscore II calculation and follow up for in hospital morbidity and mortality.

Results: The mean age of study population was 60.60±7.98 years. The mean Euroscore II was 1.24±1.22%. The observed mortality rate was 2.7%. Intraoperative complications were developed in 7.7% of patients, and 24.7% developed postoperative complications. Euroscore II was statistically significantly different (P value <0.05) between groups of patients (complicated vs. non complicated) and (survivors vs. non survivors). The area under the curve analysis showed that Euroscore II predicted mortality (cut off value: 1.015, sensitivity: 100% and specificity 68.8%) and postoperative complications (cut off value: 1.005, sensitivity: 52.7% and specificity 72.6%).

Conclusion: Euroscore II can predict mortality, defined as death within the same hospital admission, in patients undergoing off pump cardiac surgery. It can also predict postoperative complications, unlike intraoperative complications.

Key words: Euroscore II, predict, mortality, complications, off pump, cardiac, surgery.