

Major Adverse Cardiac Events After First Time Isolated Coronary Artery Bypass Grafting In Ain-Shams University Hospital 2015-2017

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BACKGROUND:

Major adverse cardiovascular events (MACE) are useful to evaluate cardiovascular outcomes after coronary artery bypass grafting (CABG). The aim of this study is to evaluate the outcome of isolated CABG Operations done at Ain- Shams University Hospital from January 2015 until February 2017 by reporting post-operative incidence of (MACE) with the records of the online Research Electronic Data Capture (REDCap) software.

METHODS:

This is a retrospective descriptive observational study demonstrating the CABG at Ain- Shams university hospital during the period Jan 2015-feb 2017. Data source is RED CAP. Incidence, risk factors and significant predictors for MACE were calculated including, in-hospital mortality, occurrence of MI, STROKE, ICU Readmission, and Need for coronary Angiography or PTCA OR CABG within 30 days postoperative. Secondary outcomes including duration of post-operative inotropic support, mechanical ventilation and ICU stay Amount of blood loss and need of reoperation, wound infection.

RESULTS:

Out of the 570 cases who met our inclusion criteria, 156 patients (27.3%) developed MACE, Including 31 hospital mortalities (5.4%), and other non-fatal events recorded in

136 patients (23.8%). Risk factors associated with hospital mortality, namely BMI, LV end-diastolic dimension, Bypass time, Post- operative positive inotropic support, Post-operative ICU stay, Ventilation duration, Gender, Hypertension, Intra-aortic balloon pump, Post-operative stroke, Reoperation, Reintubation, MI, showed to be the significant predictors of mortality after logistic regression has been done.

Risk factors associated with the development of all MACE included BMI, LV end-diastolic dimension, LV end-systolic dimension, Bypass time, Dyspnea, Symptomatic status at admission, Cardiogenic shock, Operation urgency, Cardioplegia temperature showed to be significant predictors of overall MACE after logistic regression has been done.

CONCLUSIONS:

Our results suggested that more care should be given to females, elderly and to shorten and improve the quality of our operative time. The repetition of non-fatal MACE could be modified by closer observation of the patient, once developing his first event.

KEY WORDS:

MACE, CABG, Ain shams hospital The Abstract