

Abstract No. **61**

Category: **Acute Coronary Syndromes**

Title: **A multivariate analysis of short-term clinical outcomes in diabetic patients who underwent coronary artery bypass surgery**

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**Abstract:**

Background: Diabetes is an independent risk factor for mortality due to coronary artery disease. When diabetic patients need a coronary artery bypass, it represents an additional risk factor for cardiac surgery. The aim of this study is to find which perioperative factors are associated to clinical outcomes in diabetic patients who underwent cardiac bypass.

Methods: From June 2008 to May 2018, 417 diabetic patients underwent Coronary Artery Bypass Surgery at Clinica Universitaria Colombia. The preoperative and operative data of these patients was collected during hospitalization. A previous bivariate analysis (Mann Whitney U test and X2 test) was made to identify the variables which would be entered into the multivariate analysis (Logistic Regression). The clinical outcome was measured as a composite result of postoperative stroke, prolonged ventilation, infection, renal failure, need for re-intervention and operative mortality.

Results: Ten variables were identified by the multivariate analysis: total and ICU length of stay, Left Ventricular ejection fraction, preoperative glycated hemoglobin and hematocrit, bypass time, the use of IABP, preoperative use of beta-blockers, the need for intraoperative blood transfusions and gender. With the logistic regression, four of them had a p value < 5%: ICU length of stay OR: 30.2, preoperative glycated hemoglobin OR 11.02, preoperative use of beta-blockers OR: 0.02 and gender OR: 9.8.

Conclusion: The preoperative glycated hemoglobin and use of beta-blockers are modifiable factors in diabetic patients that could be improved to obtain better results after coronary artery bypass surgery. Prospective studies are required to confirm these results.