

Comment on the study Coronary Artery Bypass Surgery in Brazil: Analysis of the National Reality Through the Bypass Registry that was presented at the 46th Congress of the Brazilian Society of Cardiovascular Surgery, Nova Lima, BH, Brazil, April 5 and 6, 2019

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This cross-sectional study started in 2015, including 2,292 patients undergoing coronary artery bypass grafting (CABG) and cataloged in the BYPASS registry, aiming to constitute an institutional database on CABG in Brazil. The main objective was to analyze the profile, risk factors, results and surgical strategy employed in these patients.

It is noteworthy the small number of patients included (2,292), which shows little adherence to the registry. In addition, we know that even with a voluntary presentation, more complex patients with very bulky data are more difficult to report. As a comparison term, DATASUS sources show that 226,629 isolated CABG surgeries were performed in a 10-year period in Brazil (Jan 2008 to Feb 2018), with or without cardiopulmonary bypass (CPB).

The results of the study^[1] presented by the authors demonstrate well our reality: 42.5% were diabetic and 71% had previous acute myocardial infarction. An important information that I consider excellent, but out of a reality for all the cases performed in Brazil, is that 32.9% of the patients went through the "heart time". Probably the discussion promoted between the clinician and the interventional cardiologist was complemented by the surgeon.

Most CABGs were performed with CPB (87%) and cardioplegic arrest (95.2%), and the mean number of vessels treated was three. Only 6.9% of the operated patients received bilateral internal thoracic grafts, which is in agreement with the international databases, although there is great regional variation.

I consider the observed mortality (2.8%) low, close to that reported by STS (about 2.3%). At InCor-São Paulo, in 2018, 595 patients underwent CABG. The overall mortality was 3.9%, but


when only elective and isolated CABG were considered, this percentage fell to 1.9%.

I salute the authors for the importance and relevance of the topic addressed. We know that records like the one proposed allow us to create a database that helps us better understand the difficulties and improve the results.

I leave some questions to Dr. Rodrigo: How do you explain such low mortality? What is the actual adjusted score of these patients (STS, Euroscore) and the evaluation of the data quality in relation to the accuracy? That is, if they are moderate or high-risk patients, better still. Did the mortality occur within 30 days or was in-hospital?

I close once again emphasizing that quality improvement programs in surgical patient care have been positively increasing the results of CABG surgery.

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Answer**The BYPASS Registry: Coping with our forthcoming needs**

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Dear Editor

We thank the comments of Professor Dallan on our paper^[1]. Comprehensive national registries on medical procedures are an established necessity, then the reason for existence of the Bypass project.

Much like other similar databases, the beginning was troubled with budget constraints and restrictive participation of dedicated centers. Nonetheless, the project is gaining traction with guidelines from medical societies categorically stating that active participation in national registries or approved surgical database is essential and a condition for delivery of high-quality cardiovascular care in myocardial revascularization and valvular heart disease^[2,3]. Additionally, establish a tool for understanding the real figures for the cardiovascular surgery practice in our country and develop strategies for improvements in quality and excellence.


Addressing the pertinent inquiries, the relative low mortality is clearly related to the quality of the selected centers involved so far and perhaps to the individual characteristics of patients referred for this treatment in our mean. A further study to clarify this aspect is in the pipeline. Also, the recently reformed BYPASS' datasheet for data collection has incorporated the EuroSCORE risk model, which is likely to provide valuable information in stratifying outcomes accordingly.

Of note, the number of patients inserted in the BYPASS database has doubled in the last two years, with the perception by the surgical teams that their data is protected, the possibility of scientific production and the prospects of implementing continuous improvement processes^[4].

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