2012 Pedro Cossio Foundation Award

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I am deeply grateful to Dr. Pedro Cossio Foundation, particularly to its President, Dr. Pedro R. Cossio, for the honor and privilege of being appointed Jury Chairman of this traditional Award. The name of Professor Pedro Cossio is a landmark in Argentine cardiology, and he is a model I have followed since the beginning of my career at the Hospital de Clínicas, an institution where both he and I have developed our teaching, academic and medical activities. So, I undertook this task with the utmost pride and responsibility.

The Scientific Committee of the XXXVIII Argentine Congress of Cardiology, held from the 5th to the 7th of October 2012, nominated five works for the 2012 twenty-sixth edition of the Dr. Pedro Cossio Foundation Award, which are commented below.

The award was granted to: "Diagnostic Accuracy of Carotid Intima-Media Thickness to Detect Coronary Atherosclerosis. Usefulness in Clinical Practice by "Daniel A. Siniawski, Walter Masson, Ignacio Bluro, Mariano Falconi, Diego Pérez de Arenaza, Luciano De Stefano, Arturo Cagide and José L. Navarro Estrada, from the Hospital Italiano of Buenos Aires. One way to move forward in the adequate restratification of the large group of individuals at intermediate cardiovascular risk is to explore the presence or absence of subclinical atherosclerosis. The authors studied 202 patients with no clinical cardiovascular disease who attended a primary prevention clinic. Following a rigorous methodology, they measured the maximum and mean carotid intima-media thickness (CIMT) in six sites at both sides, and determined the presence of atherosclerotic plaque with echo-Doppler. They also analyzed the coronary calcium score (CCS) with 64-row multidetector computed tomography. According to the Consensus on Cardiovascular Prevention recently published by the Argentine Society of Cardiology (SAC), echo-Doppler has a Class IIa indication with Level of Evidence A in intermediate-risk populations, a Class IIb indication with Level of Evidence A in low-risk populations and a Class III indication with Level of Evidence C in high-risk groups. The CCS has a Class IIa recommendation with Level of Evidence B if the patient clinical risk is intermediate, a Class IIb with Level of Evidence B if the clinical risk is low-intermediate, and a Class III with Level of Evidence C

if the risk is low or high. (1) The presence of CCS > 0 (62%) was more frequent than carotid plaque (37%). Sensitivity, specificity, positive and negative predictive values and the area under the ROC curve were used to establish the optimal cut-off points of CIMT to detect CCS > 0. The value of this work lies in the information provided on the important subject of re-classification and adjustment in stratification of the large number of "low or intermediate" risk patients who, according to Rose's paradox, have the greatest number of cardiovascular events. (2)

The rest of the nominated works were:

- "Leuko-Glycemic Index: A Risk Predictor in Acute Myocardial Infarction. Results of the SCAR (Acute Coronary Syndromes in Argentina) Multicenter Registry", by Gastón Vázquez, Enrique Domine, Pablo Merlo, Claudio Higa, Hernán Cohen Arazi, Patricia Blanco, and Alfredo Hirschson Prado. The purpose of this study was to determine the predictive value of the product of white cell count by fasting glucose in hospitalized patients with acute myocardial infarction (AMI). They analyzed 577 patients from the Research Area and the SAC Emergency Council of 88 SCAR registry centers. The patients in the upper quartile of this index showed a combined rate of death or heart failure of 28%, compared to less than 10% in the lower quartiles. Those patients with higher index values had greater incidence of conduction disorders, tachyarrhythmias and asystole. This work highlights how the combination of an inflammatory and a metabolic marker is related with mechanical and electrical outcomes. These are typical determinations, simple and cheaply obtained, which are able to accurately stratify patients who will have unfavorable outcomes. This is an affordable, simple and low-cost index in the era of high technology, with prognostic ability and the chance to be used in primary care facilities.

-"Long-Term Use of Highly Effective Drugs in Secondary Prevention of Coronary Heart Disease in a Cohort of Patients from a Comprehensive Health Network", by Emiliano Rossi, Gastón Perman, Hernán Michelangelo, Claudia Alonso, Laura Brescasin, Karin Kopitowski, and José L. Navarro

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Estrada. This work approached the disturbing is sue of adherence to mid-term use of highly effec tive drugs in cardiovascular prevention. One hun dred and twenty five patients from a comprehen sive health system were included in the study fol lowing discharge after an acute coronary syn drome. The rate of combined use of antiplatelet drugs, beta-blockers and statins in 92 cases fol lowed up for 3 years decreased from 86.4% at discharge to 66.3% at the end of follow-up. Poor ad herence to preventive pharmacological and non-pharmacological measures occurs worldwide. The EUROSAPIRE (3) and PURE (4) studies prove it. The latter showed that, in countries like Argen tina, about 50% of patients who survive an AMI or stroke do not take any highly effective drugs for secondary prevention. Therefore, a responsible and persistent work remains to be done by physi cians, the health care system and patients, to set tle this important score with the excellence of to day's medicine.

-"In-Hospital Results in Patients with Coronary Ar tery Disease Treated with Angioplasty in the Country. Argentine Coronary Angioplasty Registry (RAdAC)", by Carlos Fernández Pereira, Guiller mo Migliaro, Antonio Scuteri, Juan Mieres, Alejan dro Cherro, Amalia Descalzo, Daniel Mauro and Alfredo Rodríguez. This new coronary angioplasty survey of 3102 patients was carried out in 67 cent ers between May 2010 and February 2012. Sev enty six percent of the cases were acute coronary syndromes. All-cause mortality was 1.6%, and 2.8% had AMI as a complication of the procedure. Mor tality rate for STEMI was 4.3%, 1.7% for NSTEMI, 0.8% for unstable angina and 0.3% for stable an gina. Stents were implanted in 96% of the cases (one third of which were drug-eluting stents). Compared with the latest survey on angioplasty performed in Argentina (the XIV CONAREC reg istry), the most significant difference was the higher rate of drug-eluting stents used in the pre sent study (33.25% vs. 16.7%). (5)

-"Acute Coronary Syndrome (SCAR) Registry. Cur rent Characteristics of ST-Segment Elevation My ocardial Infarction in Argentina", by Mauro García Aurelio, Hernán Cohen Arazi, Claudio Higa, Héctor Gómez Santa María, Víctor Mauro, Horacio Fernández, Ricardo Iglesias, Alfredo Piombo, Es teban Romeo and Patricia Blanco. This work and the previous one are the result of the work per formed for several years by the Research Area of the Argentine Society of Cardiology with the col laboration of its Councils, and often the CON AREC. The periodic surveys on prevalent pro cedures and pathologies are extremely useful to become aware of the real situation of Argentine cardiology and its evolution over time. In this case, 476 patients from the SCAR registry undergoing STEMI were analyzed between March and Octo ber 2011. A total of 87 centers from all the coun try, 77% of which had cardiac catheterization ser vices, participated in the study. The average time from the onset of pain to hospital admission was 120 minutes. Nineteen percent of patients received thrombolytic therapy with a mean door-to-needle time of 55 minutes, and 60% underwent angioplas ty with a mean door-to-balloon time of 107 min utes. The remaining 21% did not receive reperfu sion therapy mainly due to late hospital admission. All-cause mortality was 8%. Times to admission, the proportion of patients undergoing reperfu sion with angioplasty, and all-cause mortality rates improved compared with the latest survey pub lished in 2001, (6) but the international recom mendations concerning door-to-needle and door-to-balloon times were not achieved. (7)

Daniel Piñeiro and Carlos Barrero were members of the Jury, and I am grateful for their expert and re sponsible participation. Dr. Pedro Cossio Foundation is pleased to announce that it is planning to grant this year the twenty-seventh edition of the Award.

Conflicts of interest:
None declared.

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