



Cardiovascular Diseases on Latin-American People

Abel Alberto Pavia L*

Department of Hemodynamics and Interventional Cardiology, General Hospital of Mexico, Mexico

Introduction

It has been estimated that mortality from cardiovascular diseases (CVD) are almost three times more frequent in undeveloped Latin-American (LA) countries than developed countries, and because there were not enough published data regarding the difference in risk profile of the LA vs. non LA population, the investigators of the CRUCIAL Study planned a sub analysis that could compare the behavior of the proactive interventional strategy in Latin-American vs. Non Latin American countries, as well the differences in the risk profile of the Latin American subjects compared with the rest of the world population included in the study [1-3]. It is also important to remember that the real worldwide behavior of the physicians was to treat Hypertension and Dyslipidemia as separate entities instead of treating cardiovascular risk. And hence The ASCOT Trial in the lipid lowering arm shown a clear benefit in relative risk reduction in morbidity and mortality we pretend to address the question through the design of the CRUCIAL Study to compare in real life the relative reduction in calculated Framingham coronary heart disease risk when a multiple risk factor intervention strategy, based on single-pill amlodipine besylate/atorvastatin calcium was compared with usual care strategy in patients with hypertension and ≥ 3 additional cardiovascular risk factors and base line cholesterol ≤ 6.5 mmol/L and no coronary heart disease [4-6]. It was a 12 month, international, multicenter, prospective, cluster randomized parallel trial. The results of this study shown that the proactive multifactorial risk factor intervention strategy that simultaneously treat both blood pressure and cholesterol regardless of individual risk factors per se, is more effective in reducing calculated Framingham 10 year CHD risk according to the ATP III guidelines. The results of this sub analyses were very important not only because in the intervention group resulted in similar decrease in relative risk reduction in both populations but also shown the difference in basal risk profile. The LA population had an average BMI of 30.4 vs. 28.4 in the non-LA ($p < 0.001$); LA subjects shown a low average HDL levels 42.8 mg/dl vs. Non LA 48.9 mg/dl ($P < 0.001$). In contrast the tobacco consumption was much lower in LA population 29.5% vs. Non LA subjects whose average was 40.8%. Regarding these differences we observed that the relative risk reduction using the Framingham score was similar in the multiple risk factor

intervention strategy. Besides the ASCOT trial, the Cards Study and the Heart Protection Study demonstrated that a decrease in 1 mmol LDL Cholesterol reduce cardiovascular events and the ACC/AHA guidelines published in 2014 recommended moderate statin doses in this kind of population. Hopefully this concept will improve the primary prevention of CVD worldwide including higher risk population as LA countries [7-9].

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*Corresponding author: Abel Alberto Pavia L, Chief of hemodynamics and interventional cardiologist, General Hospital of Mexico, Mexico, E-mail: vanina@prodigy.net.mx

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