

P1223

Attributable risk proportion of uncontrolled low-density lipoprotein cholesterol in recurrent acute coronary syndromes

A. Cordero¹, M. Rodriguez Manero², V. Bertomeu Gonzalez¹, R. Agra Bermejo², J.M. Garcia Acuna², J. Moreno Arribas¹, M.J. Moreno¹, B. Alvarez², E. Martinez Rey-Ranal¹, V. Bertomeu Martinez¹, J.R. Gonzalez-Juanatey²

¹University Hospital of San Juan, Alicante, Spain; ²University Hospital of Santiago de Compostela, Cardiology, Santiago de Compostela, Spain

Background: Coronary heart disease is chronic condition that usually has recurrent events. Risk factors for incident coronary heart disease are well known conditions related to recurrences have not been clearly outlined. Attributable risk proportion (ARP) refers to the proportion of incident cases in subjects exposed to risk factors that are attributable to that risk factor so we analysed ARP in wide cohort of patients admitted for an acute coronary syndrome (ACS).

Methods: Cross-sectional analysis of all patients admitted in two hospitals between January 2006 and December 2016. ARP was calculated by the equation: prevalence in exposed – (prevalence in exposed/odds ratio). LDL uncontrolled was codified as >70 mg/dl in patients with previous cardiovascular disease; >100 mg/dl in patients with diabetes without previous cardiovascular disease or; >155 mg/dl in patients without cardiovascular disease.

Results: We included 7,518 patients, mean age 66.9 (12.9) years, 72.5%

males, median GRACE score 143.2 (40.3) and 35.3% STEMI. Previous coronary heart disease total was present in 2,032 (23.2%) patients and they had statistically higher mean age (70.6±11.11 vs. 65.8±13.3), prevalence of diabetes (37.9% vs. 25.3%) and hypertension (72.9% vs. 53.3%) and lower smoking habit (15.5% vs. 30.9%). LDLc was lower in patients with previous coronary heart disease (90.3±33.8 vs. 111.7±38.1; p<0.01), as well as HDLc (33.5±14.29 vs. 35.9±35.5; p<0.01) and haemoglobin (13.5±3.7 vs. 14.0±2.4; p<0.01). Uncontrolled LDLc was present in 83.4% of the patients with previous coronary heart disease, in contrast to the 28.7% of patients without previous coronary heart disease; this resulted in an ARP of 13.8%. The ARP for diabetes and hypertension were 1.6% and 1.4%, respectively.

Conclusions: The proportion of attributable risk of uncontrolled LDL on recurrent ACS is 13.8% and, therefore, 1 out of every 7 recurrent ACS could be prevented by an accurate LDLc control.