



MYOCARDIAL ISCHEMIA AND INFARCTION

SINGLE-CENTER EVALUATION OF EPIDEMIOLOGY AND TREATMENT OF PATIENTS WITH ACUTE CORONARY SYNDROME AND NON OBSTRUCTIVE CORONARY ARTERY DISEASE IN THE REAL LIFE

ACC Poster Contributions

Georgia World Congress Center, Hall B5

Monday, March 15, 2010, 9:30 a.m.-10:30 a.m.

Session Title: New Insights in Treatment of Acute Coronary Syndromes

Abstract Category: Unstable Ischemic Syndrome--Clinical

Presentation Number: 1155-279

Authors: *Gaetano Maria De Ferrari, Sergio Leonardi, Lara Baduena, Alessandra Repetto, Enrico Chieffo, Angela Lesce, Maddalena Lettino, Mario Previtali, Dept. of Cardiology - Fondazione IRCCS Policlinico San Matteo and University of Pavia, Pavia, Italy, Dept. of Cardiology University of Piemonte Orientale, Novara, Italy*

Background: Data on patients (pts) with non obstructive coronary artery disease (NO CAD) in the setting of acute coronary syndrome (ACS) are usually derived from clinical trials, thus subject to selection bias.

Methods: Among all pts hospitalized for ACS in 2004-2007, we identified those with NO CAD and compared them with 1) the remaining pts, 2) a group of CAD pts, matched for age, gender, and diagnosis of ST elevation MI (STE)/non ST elevation ACS (NSTE).

Results: Of 4080 pts with ACS, 90% underwent coronary angiography. NO CAD was found in 125 pts (3.4%, age 59±12 years, 62% female), in 2.1% of men, vs 9.2 % of women and 1.8% of STE pts vs 5.8% of NSTE pts ($p<0.0001$). Pts with Left Ventricular Apical Ballooning Syndrome (LVABS) were almost all (20/22) women, showed more emotional triggers (33% vs 6% $p=0.0004$) and greater LV function impairment (LVEF 46%±11 vs 54%±9, $p=0.002$). Among NO CAD pts 66% had normal coronaries, 34% <50% narrowing, with no difference in STE and NSTE groups.

NO CAD vs CAD pts were younger (59±12 vs 66±12 yrs), more female (62% vs 28%), and NSTE (75% vs 51%) all $p<0.001$. Hospitalization was shorter (4±1 vs 5±1 days $p=0.003$), and no complication occurred. Multivariable analysis showed that non-obstructive CAD patients received at discharge less aspirin (OR 0.12, $p<0.0001$), thienopyridines (OR 0.002, $p<0.0001$), statins (OR 0.31, $p<0.0001$) and beta-blockers (OR 0.32, $p<0.0001$).

Conclusions: In a carefully controlled single-center series of patients with ACS the prevalence of NO CAD was found to be 3-4%, markedly lower than in registries and trials. NO CAD was more frequent in patients with NSTE ACS (threefold compared to STE) and in women (more than fourfold compared to men). Compared with obstructive CAD patients, NO CAD patients are significantly less treated with antiplatelet drugs, statins, β -blockers and ACE-I/ARBs. This practical behavior of the medical community is likely to be due to the uncertainties regarding both the underlying pathophysiology and the potential benefit of these agents. A prospective study targeting this specific population is warranted.