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CLINICAL CHARACTERISTICS AND SHORT-TERM OUTCOME OF PATIENTS WITH TAKOTSUBO CARDIOMYOPATHY AND CRITICAL CORONARY LESIONS: ARE THEY AN EXTREME OF THE CLINICAL SPECTRUM OF TAKOTSUBO CARDIOMYOPATHY ?

ACC Moderated Poster Contributions
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Authors: *Mario Previtali, Gabriele Crimi, Alberto Valbusa, Rita Camporotondo, Alberto Bartolini, Alessandra Repetto, Marco Rossi, Paolo Rubartelli, Francesco Chiarella, Luigi Oltrona Visconti, IRCCS Policlinico S.Matteo, Pavia, Italy, University of Pavia, Pavia, Italy*

Background: : Diagnostic criteria for Takotsubo cardiomyopathy (TTC) include acute symptoms and reversible apical (A) or midventricular (MV) wall motion abnormalities (WMA) in the absence of critical (>50%) coronary disease (CAD); recently, TTC syndrome has been observed also in pts with critical CAD, but the clinical characteristics and outcome of these pts are not defined. Thus, the aim of the study was to assess the prevalence, characteristics and short-term outcome of pts with TTC and critical CAD and to evaluate the role of CAD in TTC.

Methods and Results: We studied 174 consecutive pts (aged 70±11 yrs, 88% women) admitted with acute symptoms and ST-T changes who showed a reversible pattern of TTC (74% A and 26% MV ballooning); 15/174 pts (8.6%) had >50% stenosis of ≥1 vessel or a previous PCI or a myocardial infarction; 12/15 (80%) had A TTC and 3 (20%) MV TTC. Comparison of pts with CAD with those with no CAD showed that pts with CAD were more frequently men (42% vs 10% p=.007); no significant difference in age (75±7 vs 70±11), prevalence of hypertension (58% vs 61%), family history of CAD (10 vs 23%) or dyslipidemia (30 vs 41%), presence of a trigger event (50% vs 67%),peak troponin I (3.2±5.2 vs 4.1±4.2 ng/ml), ST-elevation at admission (83% vs 53%) and acute ejection fraction (40±11 vs 45±10%) was observed between the 2 groups. During the acute phase death occurred in 3/15 pts with CAD vs 4/159 pts with no CAD (20 vs 2.5% ,p=0.009) and major events including death , LV failure, shock and major arrhythmias occurred in 5/15 pts with CAD vs 37/159 pts without CAD (33 vs 23%, ns). Of the 15 pts with critical CAD, 8 had 1-vessel CAD, 5 multivessel CAD , 1 a previous inferior MI treated with PCI+stent and 1 previous PCI with no residual stenosis. In 10/15 pts (66%) there was no relation between the site of CAD and that of WMA.

Conclusions: 1) In a large population of TTC, <10% of pts show critical CAD; in most of them the site of WMA is unrelated to that of critical CAD, suggesting that the stenosis is an innocent bystander; 3) Compared to pts with no CAD, pts with critical CAD have a worse in-hospital outcome; 4) Pts with TTC and critical CAD may represent an extreme of the spectrum of TTC, in whom the pathogenetic role of CAD remains to be defined.