INCIDENCE AND PREDICTORS OF STENT THROMBOSIS AFTER PCI IN ACUTE MYOCARDIAL INFARCTION

Poster Contributions
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Authors: Yoon Seok Koh, Ik Jun Choi, Mineok Chang, Jin Jin Kim, Sungmin Lim, Minkyu Kang, Byung-Hee Hwang, Donggyu Moon, Jae Gyung Kim, Eun Ho Choo, Tae-Hun Kim, Suk Min Seo, Chan Jun Kim, Pum Joon Kim, Kyuk Chang, Wook Sung Chung, Youngkeun Ahn, Myung Ho Jeong, Keun-Ho Park, Young Joon Hong, Doo Sun Sim, Ki-Bae Seung, Catholic Medical Center Cardiovascular Center and Cardiology Division, Seoul, South Korea, Chonnam National University Hospital Department of Cardiology, Gwangju, South Korea

Background: Stent thrombosis has been an unsolved and catastrophic problem in patients underwent percutaneous coronary intervention (PCI). However, there was a paucity of data about the incidence, predictors and prognosis of stent thrombosis (ST) in acute myocardial infarction (AMI) after PCI.

Methods: We consecutively enrolled 4754 AMI patients who underwent PCI in the COREA-AMI (COnvergent REgistry of cAtholic and chonnAm university for AMI) from January 2004 to December 2009. We analyzed the incidence, predictors and prognosis of definite or probable ST by Academic Research Consortium.

Results: Median follow up duration was 41 months (interquartile range 27 - 58). Bare-metal stents (BMS) and drug-eluting stents (DES) were implanted in 450 and 4304 patients, respectively. Definite or probable ST during follow up occurred in 119 patients (2.5 %), including 2 acute (0.04 %), 20 subacute (0.4 %), 38 late (0.8 %), 59 very late (1.2 %). And annual incidence of ST after 1 year from index PCI was from 0.42 % to 0.52 %. There was no difference of the rate of ST between BMS and (3.8 % and 2.4 %, p=0.07). The independent predictors of ST were decreased left ventricular ejection fraction (hazard ratio (HR) 0.97, 95% confidence interval (CI) 0.96 - 0.99) and no reflow phenomenon (HR 2.0, 95% CI 1.08 - 3.72). The mortality rate was 22.7 % (27 patients) in patients with ST.

Conclusions: Stent thrombosis is not uncommon in patient with AMI underwent PCI irrespective of stent type. And decreased LVEF and no reflow were independent predictors of ST.