Abstract: P5531
A systematic follow-up strategy after percutaneous coronary intervention based on patient risk profile: the prospective POST-PCI registry

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Background: Redundant clinical and non-invasive examinations after percutaneous coronary intervention (PCI) increase the cost of medical care with no outcome improve. A multidisciplinary consensus document (MCD) providing a follow-up (FU) strategy based on 3 clinical and angiographic risk profile (A high, B intermediate, and C low) has been recently proposed.

Aim: To evaluate the potential reduction of cardiologic consults (CC), stress tests (ST), and echocardiograms (EC) with the application of the MCD after PCI.

Methods: The Post-PCI registry is a multicenter, observational, prospective data collection carried out during a four-week period that included consecutive patients undergoing PCI at 31 Italian Hospitals both for acute coronary syndromes (ACS) or stable coronary artery disease (SCAD). FU strategies were left at investigator's discretion. A comparison between the CC, ST and EC performed in the first 12-months with the potential suggested by the MCD was evaluated.

Results: A total of 1113 patients were included; 12-months follow up was available in 90% of the cases (mean age 68±11 years old, 58% ACS). Based on MCD risk profile 17% were in A, 74% in B and 9% in C strategy. On average observed CC and ST were significantly lower compared to the expected based on MCD (respectively 1.63±1.07 vs 1.91±0.28, and 0.41±0.59 vs 0.61±0.84; on the contrary EC were significantly higher (0.64±0.73 vs 0.34±0.75, all: p<0.001). The excess rate for CC, ST and EC as compared to MCD was respectively 25%, 14% and 8% for the strategy A, 14%, 25% and 50% for the strategy B and 26%, 54% and 40% for the strategy C. At multivariable logistic analysis the MCD strategy was an independent predictor (in a model with age, sex, consulting physician, public or private hospital) of an increased number of cardiac examination in patients at intermediated and low risk [B group OR 2.56 (95% CI 1.38–4.75), C group 27.00 (95% CI 8.13–89.62)]. The other independent predictor was age, with a reduced number of examination for elderly (>75 years old) patients [OR 0.59 (CI 95% 0.43–0.80)].

Conclusion: Our data suggest that in a real world population of patients undergoing PCI, a follow-up strategy based on clinical and anatomical risk profile would allow to a reduction of cardiac tests and consultations, particularly in patients at intermediated and low risk leading to an increase of appropriateness of prescription and to a cost reduction of medical care.