

Acute coronary syndrome: differences in men and women

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Aim: To study the impact of age and sex-related differences in patients with acute coronary syndrome (ACS) undergoing percutaneous coronary intervention (PCI).

Methods and Results: From March 2017 to November 2019, 9106 patients (6309 men and 2797 women) with ACS from 13 PCI centers were enrolled in this study (STENOS Registry). Among enrolled patients, men (69%) were younger than women (63y vs. 68y, P=0.001), with a higher prevalence of previous myocardial infarction (15% vs 9.5% P<0.001), previous PCI (15.9 vs. 9.7%, P=0.003), and similar frequency of previous cerebrovascular insult and peripheral artery disease (PAD). The most affected coronary artery was proximal and mid left anterior descending (LAD) in both gender and all ages. PCI on coronary artery bypass (CABG) was performed in 0.3% (0.3% in men vs 0.18% in women). In patients under age 55, 25% of men vs 11% of women (p<0.001) have had ACS. Radial approach has been done in 81%, and in 89% (87.7% in men and 88.9% in women) stent has been implanted. Average stent length was 22.01x2.99 mm in men vs 20.7x3.17 mm in women. Women have had 3% of unsuccessful procedures, in comparison to 2.3% in men. Restenosis rate was 3.9%, and more often in men (4.8% vs 2.7%, p<0.001). The highest restenosis rate was between 55-80 y in men, and between 66-80 y in women. Clopidogrel was the drug of choice in 56.49%. There was no difference in blood complications. In-hospital mortality rate for patients with ST-segment elevation myocardial infarction was 5.2%, without gender differences.

Conclusion: Although there were no differences between men and women in management and inhospital outcomes, gender was shown to be predictor of earlier occurrence of ACS, higher restenosis and re-ACS rate 1.2

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