

Impact of Gender on Outcomes in Diabetic Vs. Nondiabetic Patients Undergoing Primary PCI for STEMI

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Background: Diabetic patients(pts) and women with acute myocardial infarction(AMI) have a worse clinical outcomes compared with men.The aim of this study was to evaluate impact of gender on outcomes in diabetic versus nondiabetic pts undergoing primary percutaneous coronary intervention(PCI) for AMI.

Methods: We used our clinical database from 1/2000 to 9/2010 consisting of all pts treated by primary PCI (unlaot 12 hours) for AMI excluding pts with cardiogenic shock. The clinical and angiographic results of pts were evaluated in two groups of pts: group "A"- male and group "B"- female according to diabetes mellitus status.

Results: The study cohort consisted of 304 diabetic pts; 993 nondiabetic pts in group "A" and 115 diabetic pts;177 nondiabetic pts in group "B".Diabetic pts in both groups were with higher rates of hyperlipidemia($p<0.008$).Renal failure was more frequent in diabetics female group and in nondiabetics male group($p<0.003$).6 months mortality in male group was 4.6% in diabetic pts and 3.7% in nondiabetic pts($p=0.5$) compared with female group mortality of 15% in diabetic pts and 6.8 % in nondiabetic pts($p=0.03$).12 months mortality in male group was 6% in diabetic pts and 4.7% in nondiabetic pts($p=0.4$) compared with female group mortality of 18% in diabetic pts and 8.5 % in nondiabetic pts($p=0.02$).Multivariate analysis showed in diabetic female a trend toward increased 6 and 12 months mortality [Odds Ratio(OR)=2.1; confidence intervals(CI)=0.9-5.0; $P=0.08$] and not in male. CADILLAC Risc Score was found independent risc factor for 6 and 12 months mortality in male(OR=1.4; CI= 1.2-1.5; $P=0.0001$) and for 12 months mortality in female OR=1.4;CI= 1.2-1.5; $P=0.0001$).

Conclusion: Diabetic females sustain higher mortality following STEMI treated using primary PCI. The etiology might be related to advanced age and/or co-morbidities rather than gender and/or diabetic status per se.