

 MYOCARDIAL ISCHEMIA AND INFARCTION

SEX DIFFERENCES IN HIGH-RISK ACUTE CORONARY SYNDROMES: INSIGHTS FROM EARLY-ACS

ACC Poster Contributions
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Session Title: Sex Differences in Evaluation, Treatment and Outcomes in Patients with Acute Coronary Syndromes
Abstract Category: Unstable Ischemic Syndrome--Clinical
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Background: The role of sex on the response to therapy in ACS remains controversial.

Methods: We evaluated this in EARLY ACS, comparing early vs delayed eptifibatid in 9492 high-risk NSTEMI ACS pts (31% women) managed with an invasive strategy.

Results: Compared with men, women were older (median 71 vs. 66 y), more often diabetic (34 vs 29%), weighed less (70 vs 82 kg), had lower creatinine clearance (median 63 vs 80 ml/min) and less frequent troponin elevation at baseline (80 vs 86%); all p<0.001. Time from randomization to mechanical intervention & eptifibatid duration pre-PCI was similar, but women had less PCI (54 vs 62%, p<0.001) & more medical therapy alone (38 vs 24%, p<0.001). Non-obstructive CAD (<50% stenosis) was more prevalent in women (16 vs 6%, p<0.001), but this subgroup of women frequently exhibited high risk features (59% had ST changes, 64% elevated baseline troponin). Overall clinical benefit and major bleeding was similar but women had higher rates of transfusion (including non-CABG) (Table). After multivariable adjustment, women more often received non-CABG-related transfusion.

Conclusions: Important sex differences exist in high-risk pts with NSTEMI ACS managed with an invasive strategy. In high-risk ACS women have ST changes & elevated troponin but less coronary disease. Despite these differences, the effect of treatment on ischemic & bleeding events is similar. A better understanding of these issues, particularly higher transfusion rates in women, is warranted.

Table. Outcome, TIMI major bleeding & transfusion by sex & study treatment

	Women		Men		Adjusted OR (95%CI) Sex (W vs. M)
	Early	Delayed	Early	Delayed	
96-h death/MI/RI-UR/TBO	9.7%	10.4%	9.8%	9.1%	1.02 (0.87-1.19) p=0.813; †
30-d death/MI	10.7%	13.0%	11.4%	12.0%	0.91 (0.79-1.05) p=0.178; †
TIMI bleeding, major	2.8%	1.8%	2.4%	1.9%	1.06 (0.77-1.45) p=0.741; †
Non-CABG related	1.1%	0.7%	1.1%	1.2%	1.27 (0.83-1.92) p=0.271; †
RBC transfusion	11.1%*	9.1%*	7.4%	5.6%	0.97 (0.82-1.15) p=0.727; †
Non-CABG related	7.8%*	5.8%*	3.2%	2.0%	1.45 (1.14-1.84) p=0.003; †

(*p<0.001 vs. men for RBC transfusion; †p (interaction sex*study Rx=NS))

(RI-UR: recurrent ischemia requiring urgent revascularization; TBO: thrombotic bailout)