



 MYOCARDIAL ISCHEMIA AND INFARCTION

## THE FREQUENCY, ETIOLOGY AND OUTCOME OF ST-ELEVATION MYOCARDIAL INFARCTION PATIENTS REQUIRING URGENT CORONARY ARTERY BYPASS GRAFT

ACC Poster Contributions  
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Session Title: Acute Myocardial Infarction--High Risk Subsets  
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**Background:** Pretreatment with clopidogrel is beneficial in STEMI patients prior to PCI, however, increased bleeding in pts requiring CABG may be a limitation. Our purpose was to determine the frequency, etiology and outcome of pts requiring urgent CABG in a regional primary PCI STEMI system.

**Methods:** The Level 1 MI program is a regional program using a standardized protocol for PCI in STEMI patients in 32 rural and community hospitals. All pts were pretreated with Clopidogrel 600mg, aspirin and unfractionated heparin and enrolled in a prospective database.

**Results:** Of 2,262 consecutive patients treated as part of the Level 1 STEMI program from 2003-2008, 2.7% of patients required emergent (directly from cath lab) or urgent (within 48 hrs) CABG for the following reasons: 1) Failed PCI (or PCI complications) - n=14 (0.6%); 2) Critical left main stenosis - n=24 (1.0%); 3) Coronary anatomy not suitable for PCI - n=21 (0.9%); 4) Non-coronary indications (severe MR, rupture, dissection) - n=2 (0.1%). Mortality and major bleeding as reported for pts requiring emergent and urgent CABG are shown in the Table. Re-operation was required in 6 for bleeding, 1 for wound infection and 1 for sternal dehiscence.

**Conclusions:** Emergent or urgent CABG is uncommon but not rare in STEMI pts. The most frequent causes are critical left main stenosis and coronary artery not suitable for PCI. Given the high-risk nature of the patient population, the mortality and bleeding complications are acceptable but higher with emergent than urgent.

	Emergent Surgery N=35	Urgent Surgery N=26	Total N=61
30-Day Mortality	7 (20.0%)	1 (3.8%)	8 (13.1%)
1-Year Mortality	9 (25.7%)	1 (3.8%)	10 (16.4%)
Major Bleeding	6 (17.1%)	0 (0%)	10 (16.4%)
Re-operation	6 (17.1%)	2 (7.7%)	8 (13.1%)