Primary Angioplasty in Patients following Coronary Artery Bypass Surgery; Trends in Application and Outcome Results from the Acute Coronary Syndromes, Israel Survey (ACSIS) 2000-2008

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Background: Primary angioplasty is the treatment of choice in patients with acute myocardial infarction, however its application and outcome in post-CABG patients has not been thoroughly investigated. ***Methods***: Data was obtained from the Acute Coronary Syndromes, Israel Survey (ACSIS) for patients with STEMI. Baseline characteristics, management and outcome of post-CABG patients was compared to non-post CABG patients during 2006,2008 surveys. Percentage and outcome of patients undergoing angioplasty (post CABG compared to no-prior CABG) was obtained from the 5 surveys 2000-2008. ***Results***: Total number of patients during 2000-2008 surveys was 9781. 1002 (10.2%) were post-CABG (no significant change through the surveys, 8.6-11.3%). Reperfusion therapy for post-CABG patients was consistently lower (34- 48%) compared to non-post CABG (57%-65%). Primary angioplasty as the mode of reperfusion through the 5 surveys was 0%,37%,60%,70%,83% compared to 19%,44%,68%,77%,88% respectively. Angiographic outcome for patients with STEMI who underwent primary PCI (2006,2008 surveys) (17 post-CABG, mean age 66.6±9.1 and 821 non-post CABG, mean age 60.1±12.9). Successful outcome (TIMI flow 3) was 86% and 88% respectively. Thirty day mortality was 5.9% and 5.1% respectively (p=0.89). MACE rate was 17.6 and 12.5 respectively (p=0.54). ***Conclusions***: Application of primary angioplasty as the preferred mode of treatment for STEMI in post-CABG patients has increased during the past years and is approaching the rate in non-post CABG patients. Angiographic outcome of invasive treatment is equivalent in both groups despite more complicated anatomy and possibly larger thrombus burden post-CABG. Therefore, primary angioplasty is appropriate also in post-CABG patients presenting with STEMI.