Characteristics, Management and Outcome of High Risk NSTE-ACS Patients Managed Medically

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NSTE-ACS pts presenting with ST-depression and/or positive biomarkers are considered high-risk subjects. Current guidelines based on contemporary randomized clinical trials recommend (class IA) use of coronary catheterization followed by revascularization (PCI or CABG) in these pts. However, selection bias has led to the avoidance of early invasive management in many high-risk pts. Contemporary randomized clinical trials evaluating new treatments for NSTE-ACS pts have placed less emphasis on medically managed pts.

Aim: To evaluate characteristics, management and outcome of high risk NSTE-ACS pts managed medically.

Methods: 2346 NSTE-ACS high risk pts (ST-depression and/or positive biomarkers) from ACSIS 2004-2008.

Results: 550 (23%) pts were managed medically. This rate declined from 44% in 2004 to 21% in 2008. Medically treated pts were older (53% >75 yrs), more often with a history of stroke (16%), chronic renal failure (34%), peripheral vascular disease (17%), heart failure (27%) and worse Killip class on admission (class >I, 41%), as compared with counterparts invasively treated pts. They received less often evidence-based medication (EBM). 30-day mortality was significantly higher in medically treated pts (10.4% vs. 2.4%, p<0.0001; OR=4.83, 95%CI 3.14-7.46). Among invasively treated pts, 50% underwent PCI, 10% CABG, 3% had normal coronaries, and 12% had significant disease but were not revascularized. 30-day mortality rates in these sub-groups were: 1.5%, 5.7%, 0%, and 4.2%, respectively.

Conclusion: Despite the increase in use of invasive strategy for high-risk pts with NSTE-ACS in recent practice, a significant proportion of these pts are still managed medically. They present with worse clinical characteristics, are less likely to receive EBM and have worse 30-day outcome, as compared to pts who underwent revascularization. Randomized clinical trials in this population are needed in order to achieve widespread implementation of contemporary therapies.