The Characteristics and Outcomes of ST-Elevation Acute Coronary Syndrome Patients Receiving Intravenous Narcotics – ACSIS-2008

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Background: Current STEACS guidelines recommend intravenous narcotics (IVN) use (class I), although there are few data regarding its safety and concerns from reports of increased in-hospital mortality in NSTEACS pts receiving IVN. **Aim:** To characterize STEACS pts receiving IVN in ACSIS-2008 and to examine IVN impact on outcome. **Methods:** Retrospective analysis of 30d outcomes among STEACS pts based on IVN use, using logistic regression and propensity score analysis. **Results:** Of 765 pts, 261(34.1%) received IVN. IVN pts were younger and more likely to receive any form of reperfusion (79.7% vs 55.2%, p<0.0001), but there was no difference in the proportion of primary PCI as reperfusion modality (85.0% vs 88.9%). IVN pts received reperfusion more rapidly (73±66m vs 106±182m, p=0.02) and were more likely to undergo coronary angiography and revascularization. There was no difference in the distribution or patency of the infarct-related artery, or in adjunctive pharmacological and device use during primary PCI. 30d death was lower for IVN pts (3.1% vs 6.7%, p=0.04), as was 30d MACE of death, recurrent infarction and reischemia (11.1% vs 16.3%, p=0.05). Using propensity score analysis of 249 matched pairs, 30d death was lower (2.4% vs 6.2%, p=0.04), but not MACE (10.8% vs 13.3%, p=0.46). After logistic regression analysis, the difference in 30d death was not significant (p=0.09). **Conclusions:** A significant proportion of STEACS pts received IVN. These pts were often younger and more likely to undergo reperfusion. Their *adjusted* outcomes tended to be better, indicating that IVN use is safe and perhaps even beneficial.