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

Avital Porter ^{1,5}, Zaza Iakobishvili ^{1,5}, Alexander Battler ^{1,5}, Solomon Behar ^{2,5}, Arie Roth ^{3,5}, Shaul Atar ⁴, Valentina Boyko ^{2,5}, Aviv Mager ^{1,5}, David Hasdai ^{1,5}

¹ Cardiology Department, Rabin Medical Center, Petah Tikva, ² Neufeld Cardiac Research Center, Sheba Medical Center, Tel Hashomer, ³ Cardiology Department, Sourasky Medical Center, Tel Aviv, ⁴ Cardiology Department, Western Galilee Hospital, Nahariya, ⁵ Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel

Background: Recent NSTEACS guidelines have downgraded the recommendation for intravenous narcotics (IVN) use from I to IIa, based on a retrospective analysis of the CRUSADE registry, reporting increased in-hospital mortality. Aim: To characterize NSTEACS pts receiving IVN in ACSIS-2008 and to examine IVN impact on outcome. **Methods:** Retrospective analysis of 30d outcomes among NSTEACS pts based on IVN use, using logistic regression and propensity score analysis. **Results:** Of 993 pts, 97(9.8%) received IVN. IVN pts were more likely to have prior ischemic, revascularization, and heart failure hx and to smoke, and more likely to present with ≥Killip II (39.2% vs 10.0%) and ST depression. IVN pts more often received inotropes, diuretics, digoxin, aldosterone antagonists, and nitrates, and accordingly were more likely to have EF < 40% (39% vs 17%). In-hospital angiography and revascularization procedures were similarly performed. 30d death was similar for pts with and without IVN (3.2% vs 3.2%, respectively), as was 30d MACE of death, recurrent infarction and reischemia (16.5% vs 12.9%, p=0.33). Using propensity score analysis of 95 matched pairs, there was no difference in 30d death (2.2% vs 6.3%, p=0.16). Logistic regression analysis with adjustment for propensity score did not reveal difference for 30d death (OR 0.56 95 % CI 0.14-2.33, p=0.43), or MACE (OR 1.07, 95% CI 0.56-2.03, p=0.84). Conclusions: NSTEACS pts receiving IVN had higher-risk features, including heart failure, suggesting that the use of IVN is often for treatment of heart failure. Nevertheless, their outcomes were similar to non-IVN pts, refuting concerns for a deleterious effect.