

Abstract 0363 – Figure

in 39.7%. OSA was classified as mild (OSA-M) in 30.4% and as moderate to severe (OSA-S) in 69.6%. After a median follow-up of 75 months (IQR 71-79), patients with OSA-S showed a significantly higher incidence of the composite endpoint (relative risk 3.29, 95% CI 1.07-10.10;  $p=0.038$ ). Kaplan-Meier survival curves are represented in Figure 1. Adherence to CPAP was 42.9% and there was a numerically lower proportion of patients with composite endpoint in the group of compliant patients (33.3% vs. 37.5%,  $p=NS$ ).

**Conclusions** OSA has a high prevalence in ACS patients. Its screening has high diagnostic yield and allows to identify patients with clearly unfavorable prognosis and a potentially treatable risk factor. CPAP notes a significant number of noncompliant, but may improve prognosis, justifying further randomized clinical studies.

The author hereby declares no conflict of interest

## 0069

### Are weight and BMI good predictors of in-hospital deaths in acute coronary syndromes?

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Obesity is an independent risk factor for coronary artery disease and premature death. However, a number of studies have demonstrated that it is inversely associated with short-term mortality in patients with acute coronary artery disease. Most data suggesting this “obesity paradox” identify obesity with body mass index (BMI), but weight was not previously considered while it could be an alternative measurement that may also prove to be an accurate predictor of in-hospital mortality. The aim of this study was to determine whether BMI and weight are related to in-hospital mor-

tality in patients admitted for an acute coronary syndrome (ACS). Data was derived from the EURHOBOP cohort, a multicenter ACS hospital registry conducted between 2008 and 2010 in 7 European countries. ACS patients with discharge diagnosis of myocardial infarction or unstable angina were included. Socio-demographic characteristics, medical histories and acute episodes at entry or during hospitalization were recorded. In-hospital mortality risk by BMI or weight categories were assessed using multiple logistic regression. A total of 6298 patients were included. Mean age was  $65.3 \pm 12.7$  years, 75% were men, 27% had diabetes and 63% had hypertension. ST-elevation ACS was observed in 31% of patients. BMI ranged from 13.4 to  $64.5 \text{ kg/m}^2$ ; 46% were overweight ( $25 \leq \text{BMI} < 30$ ) and 24% obese ( $\text{BMI} \geq 30$ ). Weight ranged from 36 to 190kg. Mortality rate was 3.1% [95% CI: 2.7%-3.5%]. Based on ROC curves, optimal cutoff points to predict in-hospital survival were  $26 \text{ kg/m}^2$  for BMI and 75kg for weight. In univariate logistic regression,  $\text{BMI} \geq 26 \text{ kg/m}^2$  (OR=0.69; [95% CI]: 0.52-0.92) or  $\text{weight} \geq 75 \text{ kg}$  (OR=0.57; [95% CI]: 0.43-0.76) had a significant protective association with mortality. However, none of these associations remained significant in multivariate analysis. In EURHOBOP, higher BMI and weight in ACS patients were not associated with better short term in-hospital mortality.

The author hereby declares no conflict of interest

## 0019

### High-degree atrioventricular block complicating ST-segment elevation myocardial infarction in the contemporary era: data from the ORBI prospective French regional registry

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**Background** High-degree atrioventricular block (HAVB) is a common complication of ST-segment elevation myocardial infarction (STEMI). HAVB in STEMI is historically considered as a marker of worse outcome but overall data about HAVB in the contemporary era of mechanical reperfusion and potent antiplatelet therapies are scarce.

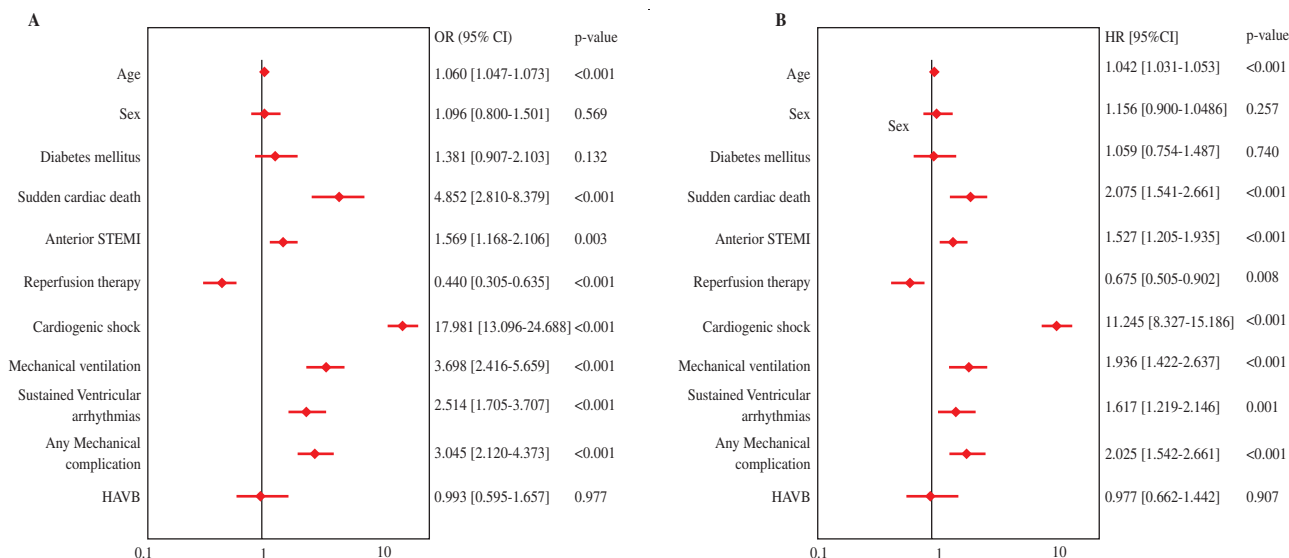
**Aim** We aimed at analyzing incidence, clinical correlates and impact on in-hospital outcomes of HAVB in a large prospective registry (ORBI) of modern management of STEMI with a special focus on potential differences between patients with HAVB on admission and those who developed HAVB during hospitalization.

**Methods** All patients enrolled in ORBI between June 2006 and December 2013 were included in the present analysis and were divided into 3 groups: patients without HAVB at any time, patients with HAVB on admission and those who developed HAVB during hospitalization.

**Results** 6662 patients (age:  $62.0$  [52.0-74.0]; male: 76.3%) were included in the present analysis. HAVB was documented in 3.5% of patients, present on admission in 63.7% of patients and occurring during hospitalization in 36.3%. Patients with HAVB on admission or occurring during the first 24h of hospitalization had higher in-hospital mortality rates (18.1% and 28.6% respectively) than patients without (4.5%) or with HAVB occurring beyond the first 24h of hospitalization (8.0%). However by multivariable analysis, HAVB was not independently associated with in-hospital mortality.

**Conclusion** Patients with HAVB had a higher mortality rate than patients without. However HAVB is not an independent predictor of in-hospital mortality.

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Abstract 0019 – Figure: Multivariable analysis

## 0302

## Rate and predictors of contrast-induced nephrotoxicity after coronary intervention depend on renal function at baseline

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**Background** Contrast induced nephrotoxicity (CIN) after coronary angiography or angioplasty (CA) has been shown to be related to mortality. The rate and predictors of CIN when preventive measures are applied are poorly documented.

**Methods** All consecutive patients submitted to non-urgent CA in 2014 with low-osmolar contrast medium were stratified for CIN risk: patients with renal dysfunction (defined as eGFR<60mL/min) had interruption of diuretics and received a 250-500mL intravenous saline infusion before and after CA. Serum Creatinine (SCr) levels were measured before CA and daily thereafter up to 5 days after CA. CIN was defined as an absolute increase of 44 µmol/L SCr or of 25% over baseline SCr level. Predictors of CIN and of recovery were determined by logistic regression. CIN patients had clinical follow-up for death or end-stage renal dysfunction.

**Results** SCr results were available in 958 patients, 72% male, 25% diabetics, median eGFR was 71mL/min before CA (interquartiles (IQ) =54; 89). Median amount of contrast was 129mL (IQ=90; 186). At 2-4 days, CIN was observed in 188(20%), driven by a 25% increase in SCr (n=185, 19%) whereas 81 (8.5%) had an increase of >44mmol/L in SCr. CIN rate was related to quartiles of eGFR before CA: 20% when eGFR<53, 14% for eGFR between 53 and 88 and 30% for eGFR>87ml/min. The amount of contrast medium was not a predictor of CIN. In patients without renal dysfunction, a lower SCr was a predictor of CIN. Conversely, in patients with renal dysfunction, older age and diabetes were associated with CIN (figure).

**Conclusions** In contemporary routine practice, CIN occurs in 20%, driven by a relative 25% increase in SCr, and irrespective of the amount of contrast medium. In patients with renal dysfunction, older age and diabetes were associated with CIN.

## 0113

## Factors associated with infarct-related artery patency before primary percutaneous coronary intervention for ST-elevation myocardial infarction: results from the FAST-MI 2010 registry

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**Background** Early infarct-related artery (IRA) patency is associated with better clinical outcomes in STEMI patients. Using the FAST-MI 2010 ST-elevation myocardial infarction (STEMI) cohort, we investigated factors related to IRA patency (TIMI 2/3 flow) at the start of procedure in patients admitted for primary percutaneous coronary intervention (PCI).

**Methods and results** FAST-MI 2010 is a nationwide French registry including 4,169 Acute MI patients. Of 1452 STEMI patients with primary PCI, 466 (32%) had TIMI 2/3 flow of IRA before the procedure. Mean age (62±14 years in both groups), GRACE score (141±31 vs 142±34) and time from onset to angiography (472±499 vs 451±479min) did not differ according to IRA patency (TIMI2/3 vs TIMI 0/1). Using multivariate logistic regression analysis, IRA patency was more frequently found in patients having called earlier (<75min, median time from symptom onset: OR: 1.60; 95% CI 1.26-2.04), or receiving antiplatelet therapy (APT) before angiography. Increasing time from diagnostic ECG to angiography was also associated with IRA patency (>90min, OR: 1,38; 95%IC 1.08-1.77). The results were confirmed by propensity score analyses.

**Conclusion** Pre-procedural IRA patency is observed in one third of STEMI patients; it is more frequently found in patients having received APT prior to angiography, as well as in patients having called early. Higher IRA patency with increasing time delays from qualifying ECG to angiography suggests an additional role of spontaneous or medication-mediated fibrinolysis.

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