0135
Cardiogenic shock in elderly patients with acute myocardial infarction. The FAST-MI programme
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Rationale
Though cardiogenic shock (CS) after AMI is more common in the elderly, information on its prevalence, determinants and prognostic factors in the aged is scarce.

Methods
We analysed incidence and 1-year mortality of CS in 4 nationwide French surveys carried out 5 years apart from 1995 to 2010, including consecutive STEMI and NSTEMI patients over one-month periods.

Results
Among the 10,610 patients, 3,389 were aged ≥75 years, of whom 9.9% developed CS.

Incidence of CS decreased from 11.6% in 1995 to 6.7% in 2010, P<0.02. Use of PCI ≤3 days from admission increased for both patients with and without CS (11% to 48% and 5% to 55%, respectively), as did statin use (1% to 70% and 4% to 82%, respectively). Occurrence of atrial and ventricular fibrillation decreased in patients without CS (22% to 9%, and 3.6% to 1.5%, respectively, P<0.001), but not in those with CS (19% to 20%, and 10% to 8%, respectively).

Conversely, AV block decreased in patients with CS (30% to 11%) or without CS (9% to 3%).

One-year mortality was 77% in CS patients, versus 22% in patients without CS. From 1995 to 2010, mortality decreased from 87% to 59% in CS patients and from 30% to 17% in patients without CS (P<0.001). In CS patients, age, ventricular fibrillation and STEMI, were independent correlates of increased 1-year death, while study period was associated with decreased mortality (2010 vs 1995: HR 0.56, 0.33-0.94 P=0.03), along with early use of PCI, statins or LMWH.

Conclusion
The prevalence of CS is higher in elderly patients but has decreased in the past 15 years. One-year mortality remains considerable, but decreased by 32%, a decrease potentially mediated by broader use of PCI, statins and LMWH. Occurrence of ventricular fibrillation in patients with CS is a correlate of increased one-year mortality.

0260
3D-transoesophageal echocardiography usefulness for assessment of cardiac output in intensive care unit: an ultrasound versus thermodilution comparative study for patients under mechanical ventilation
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Introduction
Hemodynamic evaluation is a major tool for management of intensive care unit (ICU) patients. Due to insufficient echocardiography, thoracic echocardiography could be noninformative (dorsal decubitus, mechanical ventilation).

Three-dimensional trans-oesophageal echocardiography (3D-TEE) is a new non-invasive ultrasound modality for quantitative and semi-quantitative assessment of cardiac output. Only few validation data are available in this indication.

Aim
To evaluate feasibility and diagnostic performance of 3D-TEE for assessment of cardiac output in ICU. Intermittent thermodilution measurement via transpulmonary method was used as benchmark.

Methods
Fifteen patients under mechanical ventilation, without any significant valvular disease or mechanical hemodynamic support were prospectively included. Cardiac output was calculated with transpulmonary thermodilution (PICCO monitoring). 3D-TEE (Philips, IE33) was performed just after invasive measure. Left ventricular volume loops were recorded then semi-automatic analysis of 3D-loops were performed off-line and blinded to thermodilution values. We used correlation coefficient and Bland-Altman method to compared these two modalities.

Results
Thirty invasive measures were recorded for fifteen patients under mechanical ventilation. 29 (97%) 3D-TEE were usable for semi-automatic analysis of left ventricular volume and cardiac output. Correlation coefficient between invasive and non-invasive methods was 0.78. Cardiac output estimation with 3D-TEE were associated with a mean bias of 0.35 l/min with 95% limits of agreement between -2.8 et 2.2 l/min. Mean duration of 3D-TEE semi-automatic analysis was 5 minutes.

Conclusion
Cardiac output assessment with 3D-TEE is feasible with ICU patients under mechanical ventilation. Data obtained with this new non-invasive ultrasound modality have a good correlation with thermodilution values. Bias seems to be acceptable but 95% limits of agreement of both methods are quite broad.

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0148
Characteristics and clinical outcome of patients admitted in the intensive care unit for acute myocarditis
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Introduction
Although myocarditis is increasingly recognized in clinical practice, the characteristics and prognosis of patients with suspected myocarditis are poorly defined. Therefore, the aim of this study was to describe the characteristics and clinical outcome of patients admitted to a university hospital for acute myocarditis.

Methods
Retrospective study of patients admitted to the cardiology intensive care unit of a university hospital between January 2009 and March 2014 with a discharge diagnosis of myocarditis. Patients with suspected acute coronary syndrome (ACS) underwent either coronary angiography or coronary computed tomography angiography (CCTA). Clinical follow-up was obtained by phone call to the referring physician.

Results
During the study period, 84 patients (mean age 37±14 years old, 83% males) were admitted for myocarditis. 54% of admissions occurred between November and February. A chest pain was present in 93% of Pts and 35.7% of Pts had fever in the preceding month. In 38.1% of Pts, ECG was suggestive of ACS whereas diffuse ST elevation was found in 26.2% of Pts and a normal ECG in 23.8%. A pericardial effusion was found in 31.3% of Pts. Mean ejection fraction was 59±6±8%. Peak Tropomin was 657±704ng/l.

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CRP was increased in 75.3%. A cardiac MRI was performed in 90.5% of cases and a coronary angiography in 47.6% of cases. No endomyocardial biopsy was performed. An infectious etiology was found in 47.6% of cases. Treatment included aspirin (87.5%), beta-blockers (66.5%), and ACE inhibitors (42.9%). There was no death during hospital stay. At a mean follow-up of 28±20 months, 2 Pts (2.6%) died from non-cardiac causes and recurrences occurred in only 5.3% of Pts. Mean ejection fraction was 62.1±5.3.

Conclusion Patients admitted in a cardiology intensive care unit for acute myocarditis are mostly young males and a large part of admissions occurs during winter. In-hospital and mid-term outcome is good.

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0358

Incidence and predictors of major haemorrhagic complications in pulmonary embolism patients receiving thrombolytic therapy

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Thrombolytic therapy (TT) has a beneficial risk to benefit ratio for patients presenting with massive pulmonary embolism (PE). The PEITHO study suggested that patients with sub massive PE may improve their hemodynamic status and prognosis after TT but with an excess of haemorrhagic complications (HC). Elderly patients are also more likely to experience severe HC and it has been suggested that half doses TT may be indicated in this population. TT indication remains questionable in these borderline patients.

To investigate incidence and predictors of major HC in our population we performed a retrospective analysis of all PE patients treated with TT in the Cardiac Intensive Care Unit of our university hospital from 1992 to 2014.

From February 1992 to December 2014, 293 PE patients received TT. Among them 35 experienced severe HC following the PEITHO study definition. 23 (8%) patients died during the acute phase, 7 from HC and 16 from other causes. TT indication was not significantly different between HT patients and non HT patients.

Among them 35 experienced severe HC following the PEITHO study definition.

0291

Incremental value of copeptin with high sensitivity cardiac T troponin for exclusion of severe coronary stenosis in patients with preexisting coronary artery disease

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Background Acute chest pains without troponin raise are challenging in patients with pre-existing coronary artery disease (CAD).

Purpose To evaluate the diagnostic and incremental prognostic values of copeptin in patients with normal high sensitivity troponin T (hs-cTnT) value, pre-existing CAD and acute chest pain.

Methods This monocentric prospective study included 91 consecutive patients with documented CAD admitted in the intensive care units for chest pain lasting for less than ten hours. Acute coronary syndrome (ACS) was excluded with ECG and hs-cTnT values ≤14ng/L at baseline and with dynamic changes ≤50% three hours later and <20% if baseline hs-cTnT between 14 and 50ng/L. ACS were diagnosed in 24.2% of men and 8.5% of women. ACS were diagnosed in 24.2% of men and 8.5% of women. ACS were diagnosed in 24.2% of men and 8.5% of women. ACS were diagnosed in 24.2% of men and 8.5% of women. ACS were diagnosed in 24.2% of men and 8.5% of women. ACS were diagnosed in 24.2% of men and 8.5% of women.

Results Mean age of patients was 58±8,72 (79.3%) were male. The mean time between chest pain onset and blood samples was 4±2 hours. According to clinical decision, coronary angiography was performed in 83 patients (69.2%), with 12 severe stenosis diagnosed (19%). No ischemia was detected with the stress tests (28 patients). Among the 52 patients with a negative

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