Methods: We retrospectively retrieved all the patients diagnosed for AP in our ED from 01/2011 to 06/2013. We collected the data from medical files and through a questionnaire sent to general practitioners.

Results: We identified 150 patients (age 42±16 years, 66% males). The 2004-ESC guidelines criteria for the diagnosis of AP were met only in 48% of cases. An increased (>5mg/l) C-reactive protein (CRP) was present in 51.3% of patients, with significantly higher levels when symptoms onset exceeded 24 hours in patients meeting the diagnostic criteria (79.1 vs. 14.9mg/l in patient with – vs. without ESC diagnostic criteria, p<0.029). In 49% of cases, ECG was compatible with the diagnosis of AP. An echocardiography was performed during the ED stay in 77% of patients, showing a pericardial effusion in 26% of cases. Patients were hospitalized in 27% of cases. Aspirin was the most often prescribed (84%). Colchicine alone or in association with aspirin was proposed in 30% of patients and was significantly associated with a medical history of pericarditis (63% with- vs. 25% without history of AP, p<0.0001). The duration of drug therapy was longer for colchicine than for other anti-inflammatory drugs (respectively 58±31 vs. 26±13 days, p<0.01). Follow-up data were only available in 50 patients: only 52% have consulted their physician within a period of 1 to 120 days after discharge. Treatment side effects were noted in 6% and recurrence in 4% of cases.

Conclusions: This study highlights the lack of a systematic guidelines-based management of patients with acute pericarditis in the emergency room. The assessment of CRP is of diagnostic value in this setting especially after 24 hours of symptoms onset. This marker may be considered in the future guidelines updates. Since a majority of these cases are managed as outpatients, emphasis should also be made for an adequate and systematic follow-up.

0043

Prognosis of patients admitted with chest pain in emergency department and discharged with low risk of acute coronary syndrome

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Introduction: Chest pain is a frequent cause of admission to the emergency department (ED). The diagnosis and medical care of acute coronary syndrome (ACS) with ST-segment elevation (ST+ ACS) are more standardized than non ST-segment elevation ACS (NST ACS). There is very few series on patients classified as low ACS-diagnosis probability. We aimed to assess the 1-year outcome of patients admitted for chest pain in ED and discharged with low risk of ACS.

Methods: This restrospective study included all patients admitted in the ED of University Hospital Center of Limoges between January and March 2013 for chest pain, without ST-segment elevation and normal troponin level. Patients' characteristics and initial diagnosis were collected in ED records. Final diagnosis was obtained by phone one year later, from general practitioners or alternatively directly from the patients themselves.

Results: Among the 244 patients studied, 38 (15.6%) were lost during follow-up. Mean age was 50±17 years, 58% being males. Among the 41% of cases in whom the initial diagnosis (i.e. ED discharge) was modified during follow-up, 9% (n=8) were diagnosed with coronary disease, and 38% (n=32) with panic attack. Major adverse cardiac events rate was 2.4% (n=5) in the whole population, and 60% of them were directly discharged to home. In the ED, the detection of a cardiovascular etiology of chest pain was accurate with good specificity (96%) but lower sensibility (61%). Of note, the rate of false negative patients was 8.5%.

Conclusion: Low probability NST SCA diagnosis is complex in the ED and may frequently lead to erroneous diagnosis associated with therapeutic delay. Nevertheless, cardiac disorders are uncommonly misdiagnosed. A systematic, individualized and close monitoring after ED discharge is mandatory.

0227

Why patients delay their call during STEMI?

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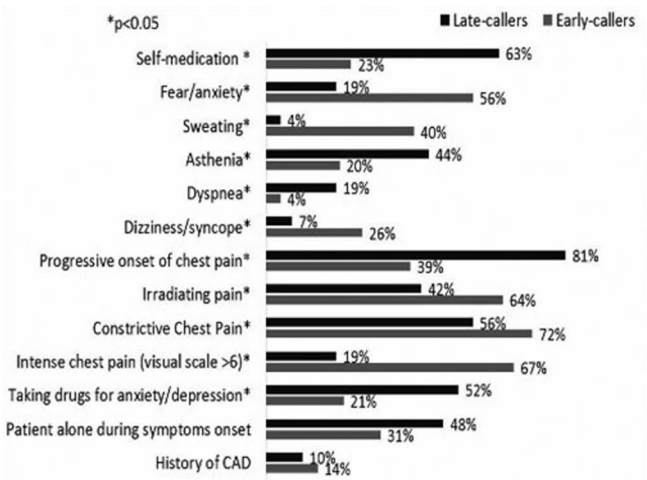
Purpose: Despite public campaigns for calling rapidly the emergency phone number in case of chest pain, many patients still delay their call. We sought to determine factors influencing the call delay in case of STEMI.

Methods: We studied 206 consecutive patients admitted for STEMI. They were classified according to tertiles of delay between symptoms onset and the first call (« early-callers » for 1st & 2nd tertiles, « late-callers » for the 3rd tertile). We compared these 2 groups according to the registry data. We contacted the survivors to obtain further information on socio-economic status and events during symptoms onset.

Results: The patients (age 64±14 y, 75% males) called on average in 2.5±3.5 hours (early-callers 1.6±1.8 vs. 4.4±5.0 for late-callers). In multivariate analysis, the following factors were significantly associated with late call: age (OR=1.03, 95%CI: 1.00-1.05), living >30 min. from cath lab (OR=2.8, 1.1-7.1), symptoms onset between 00:00-05:59 am (OR=2.3, 1.1-4.8) and first call to the family physician (OR=1.9, 1.8-3.6). The respondents to interview did not differ from others regarding age and call delay. Main variables during interview are compared between in the 2 groups in Figure. In a second model using interview variables, following factors were associated with late call, adjusted for age and sex: symptoms onset between 00:00-05:59 am (OR=3.8, 1.00-14.5), self-medication (OR=7.7, 2.2-27.0), mild pain (visual scale <6: OR=10.0, 2.94-33.3) and symptoms onset out of home (OR=6.7, 1.04-50.0). We found no association between call delay and education level, occupation, cardiovascular risk factors and history.

Conclusions: Delayed call for STEMI is multifactorial. Our data are useful to target the population and highlight messages in future campaigns.



Abstract 0227 – Figure: Comparison of early vs. late callers

0337

Prognostic value of reflux of contrast into the inferior vena cava or hepatic veins in pulmonary embolism

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Background: Computed tomography pulmonary angiography (CTPA) is routinely used to diagnose pulmonary embolism (PE). Reflux of contrast ▶

medium into the inferior vena cava or hepatic veins (IVC) on CTPA is a simple sign that could help for PE risk stratification. The purpose of this study was therefore to investigate prognosis significance of contrast reflux into IVC in acute PE.

Methods and Results: 141 consecutive patients with acute PE confirmed by CTPA were prospectively included between March 2010 and February 2013. Degree of reflux into the IVC and the hepatic veins was graded from 1 (none) to 6 (severe) by 2 independent observers, blinded to each other. The presence of reflux in IVC was compared with clinical parameters used in the ESC guidelines for PE risk stratification: electrocardiographic signs, Troponine I, BNP and right ventricular dilatation (RV/LV>0,9) or dysfunction (TAPSE < 17mm, S'<10cm/s) by echocardiography. Composite endpoint was 30-days mortality or clinical deterioration requiring treatment escalation (catecholamine infusion, thrombolytic treatment or cardiopulmonary resuscitation). The composite end-point was observed in 5% of patients with a 30-day mortality rate of 2.1%. Heart rate >110 bpm (OR 5.6, 1.03-30), atrial fibrillation (OR 6.3, 1.05-37.7), negative anterior T waves (OR 6.1, 1.3-29.1), elevated Troponin Ic (OR 5.4, 1.1-25.8), elevated BNP (OR 11.5, 1.3-98.2), right ventricular dysfunction (OR 5.3, 1.1-25.1) were predictors of death or clinical deterioration. Contrast reflux into IVC from grade 4 to 6 was observed in 17% of patients. Inter-observer agreement was excellent (Concordance correlation coefficient 0.91). Grade 4 reflux or greater was a strong predictor of events (OR 15.1, 2.8-83.7) and had a 86% specificity and 71% sensitivity to predict adverse outcomes (AUC 0.88).

Conclusion: A grade 4 or higher contrast reflux into the IVC is a simple and frequent CTPA sign, highly predictive of adverse outcomes in PE patients.

0497

Prehospital management of STEMI at the university hospital of Reims: are delays in adequacy with recommandations?

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Introduction: the prognosis of STEMI is associated with the delay between the symptoms onset and the reperfusion. Recent recommandations regarding patient care differ widely according to the estimation of this delay, which should depend of the distance between first medical contact and PCI capable center. Our study aimed to appreciate the timing of prehospital and hospital management of STEMI in our settings.

Methods: We included prospectively between october 2013 and february 2014 incoming patients with acute STEMI and recorded the timings of the onset of symptoms, first medical contact, therapeutic decision, (thrombolysis or primary PCI), arrival in PCI-capable center and revascularization. Distance between first medical contact and the PCI unit was classified as none (emergency room), zone 1 (same town), zone 2 (under 30km), zone 3 (30 to 100km) and zone 4 (over 100km).

Results: Forty-seven patients were included, 82% men, average age 61±12.2 years. Delay from symptoms onset and first medical contact was 120±123 min (range: 2-585), less than 2 hours for 75% of the patients, and was 2h longer when patients came by themselves to the emergency department. Delay between medical contact and decision averaged 33 min (1 to 110min), thrombolysis was performed in 16 patients, 6 of which less than 30min after contact. The average door-to-balloon delay was 162±12 min. The transfer delay was 127±74 min and was associated with the distance between the first contact location and the PCI center. The difference between the effective delay, and the theoretical travel time ranged from 50 min in zone 1 to 150min in zone 4, increasing with the distance, mostly because of waiting for transportation in the emergency room.

Conclusion: The delay between first medical contact and effective arrival in our PCI capable center was always much longer than could be expected from the distance, thus displaying that the recent European recommendations have yet to be explained and enforced.

0118

Takotsubo cardiomyopathy following acute cerebral events

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Objective: Takotsubo cardiomyopathy is characterized by a transient apical ventricular dysfunction typically induced by an acute stress. Acute cerebral events including ischemic stroke (IS) or Epileptic Event (EE) may both be associated with massive catecholamine release. We aimed to identify the characteristics and outcomes of patients who experienced Takotsubo syndrome complicating an IS or EE.

Methods: Between 2008 and 2013**,** 87 patients were admitted in our Intensive Care Unit for suspected Takotsubo syndrome, of whom 6 previously experienced acute cerebral symptoms with either IS or EE, within two days. Takotsubo syndrome was diagnosed on Cardiac Magnetic Resonance, echocardiographic, electrocardiographic, biological and coronary angiography data.

Results: Five women and one man were included. The mean age was 63.7±20.1 years old (range: 44-84). Four of them (67%) presented initially an acute IS and two (33%) had EE. The suspected culprit brain injury was the insular cortex for three patients or posterior fossa for two patients. Hemiparesis, aphasia and cerebellar symptoms were the main neurological signs. Abnormal ECG findings including ST segment elevation (33%) or T waves inversion (50%) developed between few hours and 48 hours after the onset of IS or EE. Troponin peak was at 1,8 (0,79-14,11) µg/L. A transient alteration of the left ventricular ejection fraction (46±12%) with apical hypokinesis was found at echocardiography. Two (33%) patients developed an acute heart failure. Coronary angiography confirmed the lack of significant coronary stenosis for all the patients.

Conclusion: Takotsubo cardiomyopathy can develop early within in the first days after an acute cerebral event, predominantly in women with insular or posterior fossa lesions and induced by possible vegetative reactions.

0301

Pulmonary embolism mimicking acute coronary syndrome: How to make the right diagnosis? A case report and literature review

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Introduction: Clinical and electocardiographic features in Pulmonary Embolism lack of specificity and may mimic an acute coronary syndrom.

Case presentation: We report a case of a 55-year-old man hypertensive and with history of active smoking, presenting with epigastric pain and polypnea, the Troponin was positive (12.51 ng/ml , normal values <0,06ng/ml) and at the ECG we found negative T waves in anterior teritory initially diagnosed as Non-STEMI, the coronary angiography was normal, and the echocardiography found a major dilatation of right chambers (DTDRV / DTDLV >1) and pulmonary hypertention (45 mmHg), thoracic CT angiograpm objectify a massive embolism of the right and left pulmonary arteries, which confirmed the diagnosis of intermediate risk pulmonary embolism and the treatment was adjusted, the patient was discharged under acenocoumarol.

Conclusion: We report through this clinical case a misdiagnosed pulmonary embolism treated as Non-STEMI, the clinical and electectrocardiographic features may be confusing between this two emergencies, because of lack of specificity of the symptoms, the hypothesis of pulmonary embolism may be suspected by the echocardiography when aspect of acute Cor pulmonale is present and the confirmation should be obtained by thoracic CT angiogram.