

## 325

**Ivabradine and dobutamine associated as a pure inotropic drug in cardiogenic shock?**

Benoit Lattuca (1), Guilhem Malclès (2), Stéphane Cade (3), Florence Leclercq (3), Jean-Christophe Macia (3), Christophe Piot (3), Frederic Cransac (3), Jean Luc Pasquie (3), Jean Marc Davy (3), François Roubille (4) (1) *CHU Montpellier, USIC, Montpellier, France* – (2) *CHU Clermont-Ferrand, Clermont-Ferrand, France* – (3) *CHU Montpellier, Montpellier, France* – (4) *Heart Institute, Montréal, Canada*

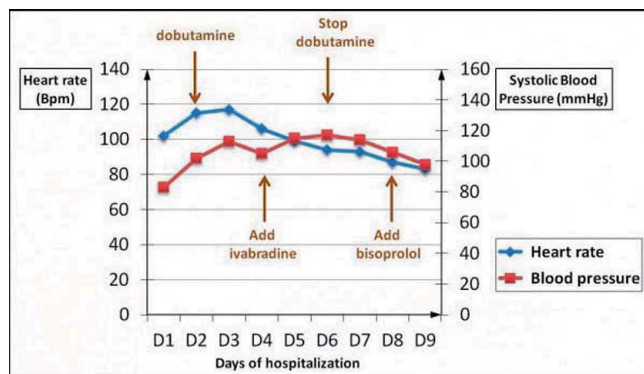
**Introduction :** Dobutamine remains gold-standard treatment in cardiogenic shock. However, it exacerbates tachycardia, worsening heart failure. Ivabradine, a specific inhibitor of If channel, could reduce this deleterious effect in association with dobutamine in patients with cardiogenic shock.

We report the case of a 41-year-old woman admitted in intensive care unit for a severe heart failure with hemodynamic shock. She had no medical history.

She suffered from thoracic and epigastric pain and cholecystitis was initially diagnosed with an indication of sphincterotomy. However, her clinical status progressively worsened with severe dyspnea and global heart failure requiring appropriate treatment. ECG showed inverted T waves in the lateral leads and echocardiography showed a dilated cardiomyopathy with severe systolic alteration (LVEF: 35%). Coronary angiogram was strictly normal. Finally, no evidence was found on cardiac MRI for ischemic process or myocarditis. She progressively worsened with renal and hepatic dysfunction. Troponin and inflammation markers remained negative. It was necessary to introduce dobutamine and intravenous diuretics but we noticed an initial increase in heart rate concomitantly with blood pressure. We added ivabradine in order to reduce heart rate without effect on blood pressure (fig). Her clinical status improved and dobutamine could be stopped after 5 days and beta-blockers were then introduced.

**Discussion:** Heart rate is a well-known marker of prognosis and tachycardia worsened by dobutamine could be deleterious to evolution of patient with cardiogenic shock. Ivabradine could be helpful in reducing heart rate without effect on blood pressure. However, this drug is indicated in stable heart failure but, to this day, hemodynamic instability is excluded. New prospective studies seem necessary to evaluate this benefit.

**Conclusion:** In cardiogenic shock, association of dobutamine and ivabradine could be interesting to create a pure inotropic drug.



## 326

**Pulmonary embolism and thrombolysis**

Naima Baaddy, Zineb El Honsali, Farah Korchi  
*Faculté de médecine HassanII Casablanca, cardiologie, Casablanca, Maroc*

**Objective:** To determine the value, limitations and complications of thrombolysis in pulmonary embolism.

**Patients and methods:** This is a descriptive study of all patients admitted to the cardiology department of CHU Ibn Rushd from 2009 to 2011 with pulmonary embolism confirmed by echocardiography and chest CT angiography.

**Result:** these 68 patients with a mean age of 49 months or over 19 years with a female.

The styles of pulmonary embolism vary widely with the management is different.

5% of patients with pulmonary embolism occurs in cardiac arrest and fibrinolysis offers better benefits and has no indication cons.

10 to 20% of pulmonary embolism with hemodynamic instability occurs PAS  $\leq$  90 mmHg or respiratory distress Quick Installation fibrinolysis in these patients provides better clinical improvement and ultrasound.

Pulmonary embolism at low risk and intermediate risk shows no indication for fibrinolysis using simple anticoagulation. The rate of cerebral hemorrhage is zero, 5 cases of gastrointestinal bleeding under control, intra-hospital overall mortality is about 7%.

**Conclusion:** This series demonstrates the value of thrombolysis on the dissolution of stones in the pulmonary arteries and hemodynamic parameters as well as the reduction in mortality despite the slight increased risk of bleeding.

## 327

**Hemorrhagic stroke: epidemiology, clinical presentation in 80 moroccan people**

Zineb El Honsali, Meryem Alj, Naima Baaddy  
*Chu ibn rochd, Casablanca, Maroc*

Bleeding is the major complication of anticoagulant therapy. The criteria to define the severity of bleeding varies considerably between studies, depending on the variation in rates of bleeding reported. They depend on the intensity of anticoagulant effect, patient characteristics and duration of treatment.

**Objective:** The aim of our study is to investigate the epidemiological, clinical and evolution of 80 cases of hemorrhagic stroke with variable severity collected at the cardiology department of the University Hospital Ibn Rushd of Casablanca.

**Results:** The average age of our patients was 46.17 years, with a 62% female predominancy. The indications of anticoagulant therapy were: the atrial fibrillation in 60% of cases, a mechanical prosthesis in 20% of cases. Bleeding is manifested by gastrointestinal bleeding in 30% of patients, rectal bleeding in 20% of cases, gingival bleeding in 18% of cases, haematuria in 15% of cases, bruising of the soft tissues in 10% of cases, and a hematoma of floor of mouth in 2% of cases. Patients received transfusions of packed red blood cells and fresh frozen plasma with clinical and biological improvement.

**Conclusion:** The risk of bleeding under oral anticoagulation cannot be considered in isolation, the potential decrease in thromboembolic phenomenon must be balanced versus the potential increased risk of bleeding.