

# "An image is worth 1000 words"

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## **Potential conflicts of interest**

**Speaker's name: Carlos Braga** 

**☑** I do not have any potential conflict of interest

- 77 years-old woman
- Medical history
  - Cardiovascular risk factors: hypertension, dyslipidemia.
  - Coronary disease with previous PCI of the left anterior descending artery with a bare metal stent
  - Rheumatic mitral stenosis
  - Permanent atrial fibrillation with use of warfarin
  - Previous ischemic stroke

### **Gynecological surgery**

### **Emergency room**

Unconscious. Hypotensive and with signs of poor peripheral perfusion

ECG: Atrial fibrillation with ST-segment elevation DII, DIII e aVF and complete AV block

INR = 1.1

→ STEMI complicated with cardiogenic shock

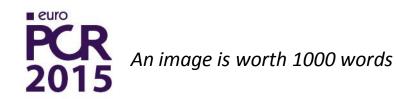
### 2 weeks later

Pre-hospital emergency activation for altered state of consciousness

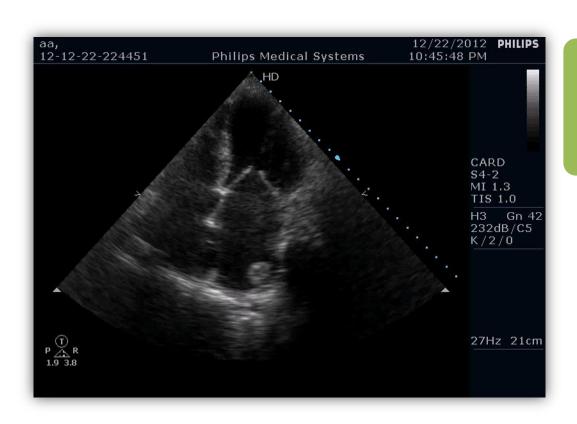
AAS 250 mg, Clopidogrel 600 mg and Unfractionated Heparin 5000 U

Volume expansion and perfusion of dopamine

Emergent coronary angiography

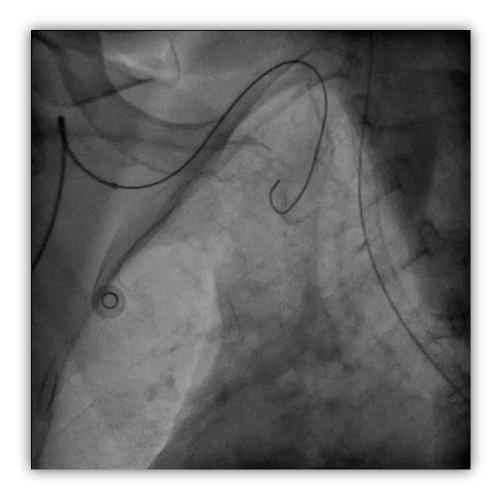


### Cardiac catheterization laboratory



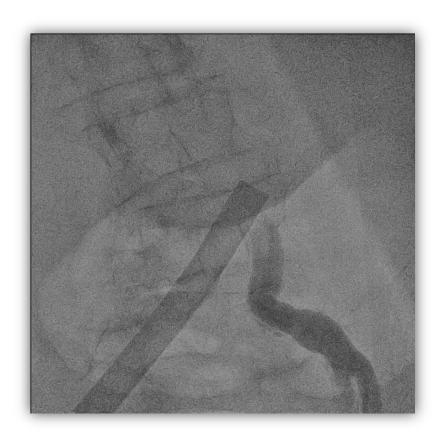
Focused assessment diagnostic echocardiography

- Severe depression of left ventricular systolic function
- Absence of mechanical complication
- Image in the left atrium compatible with thrombus

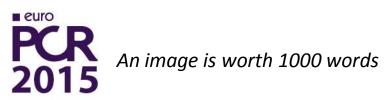


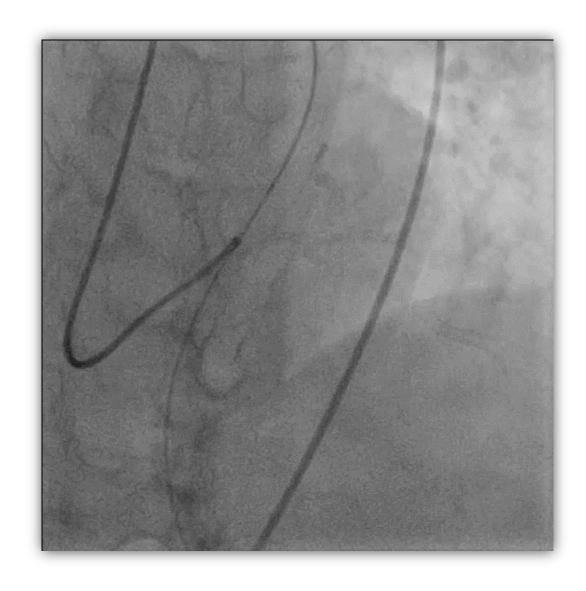
 Radial access was obtained, but heart catheterization was not possible due to subclavian tortuosity.

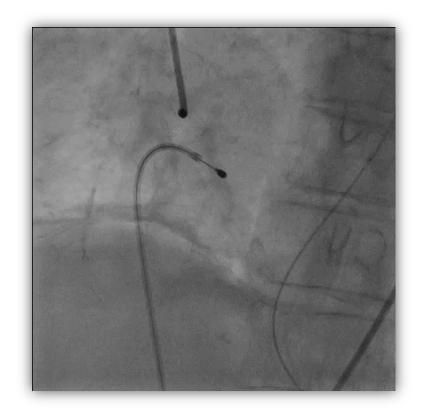


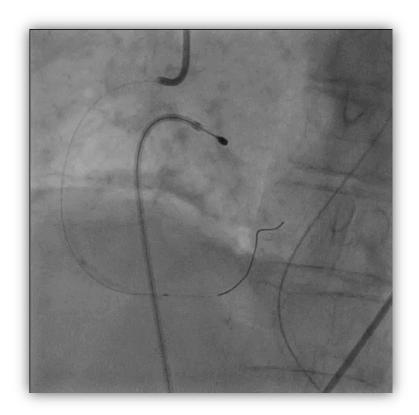


- Femoral pulses were not palpable;
- Puncture of the left femoral artery was very difficult;
- The progression of the guidewire in the aorta was difficult and a hydrophilic guidewire was used to perform the procedure.







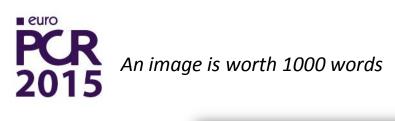


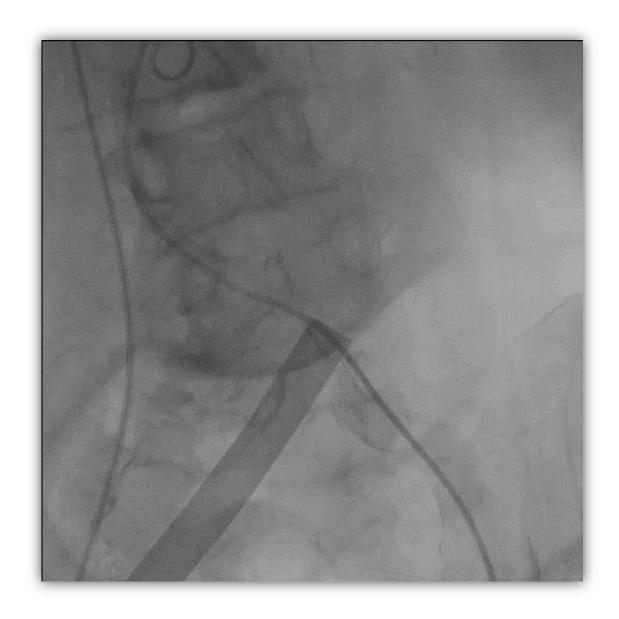
- Mid-segment right coronary occlusion
- Thrombus aspiration was performed with reperfusion

After the procedure and hemodynamic stabilization, the patient showed signs of poor perfusion only in the lower limbs.

Puncture of the left femoral artery was very difficult

We decided to perform an aortography





Intracardiac thrombus embolization with occlusion of the infrarenal abdominal aorta extended to the origin of the common iliac arteries

### **Vascular Surgery was performed:**

- Thromboembolectomy of femoral arteries
- Thromboembolectomy of right iliac axis unsuccessful
- Thromboembolectomy of left iliac axis using a Fogarty catheter and performing femoro-femoral bypass

### The patient was admitted to the Intensive Care Unit:

- She kept refractory to shock, despite vasopressor therapy
- Some hours after surgery, a lower limb arterial doppler was performed and showed no flow
- The patient evolved to multiorganic dysfunction and died 24 hours after admission.



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- This case shows a cardioembolic catastrophic phenomenon with coronary embolization and embolization to the abdominal aorta.
- Acute aortic occlusion is a rare but devastating pathology and embolization of an intracardiac thrombus is one of the potential causes.
- This disease has high morbidity and mortality, even after early recognition and intervention.
- The causes of death are associated not only with major organ ischemia but also with severe respiratory failure, fatal arrhythmia, uncontrollable hyperkalemia or renal failure secondary to myonecrosis.
- Diagnosis requires a high index of suspicion; in this case, the presence of a cardioembolic source and technical difficulties in femoral access, raised the suspicion of aortic occlusion.