**Case report**

- 35 year old female
- Smoker
- Medicated with oral contraceptive

17h30
- Chest pain
- EMS arrived (first medical contact)

18h00
- ECG without ST elevation
- 05' 11'
- 1ª Hospital (without P-PCI)
- Arrived to P-PCI

18h30
- ECG with ST elevation in aVL and I
- 35' 41'
- Hospital in P-PCI

19h00
- ECG without ST elevation
- 40'

**Coronary angiography**

- Normal and dominant right coronary artery
- Long dissection extending from the left main to the mid segment of the LAD
- Large thrombus on the distal left main and proximal LAD
- The patient was getting worse with hemodynamic compromise
- It was decided to administer 10 mg of tenecteplase intracoronary and tPA inhibitors

**Percutaneous coronary intervention**

- Marked dissolution of thrombus was seen a few minutes later, but LAD was still occluded
- BMW wire was attempted to cross the LAD without success (progression through the false lumen): the wire was removed from the LAD and crossed to the circumflex, which was not dissected
- The BMW wire was then gently backed up to the distal left main and advanced apparently through the true lumen of the LAD, initially without reperfusion
- Suddenly, the “body” of the wire collapsed the false lumen with immediate reperfusion
- After reperfusion, the patient had 5 episodes of ventricular fibrillation

**Conclusion**

- "In general, a conservative approach avoiding revascularization for stable SCAD patients is advocated by most experts. However, PCI or CABG may be required in patients with ongoing ischemia or critical anatomy involvement (eg, left main)."
- "If a pronounced dissection persists in a major vessel (left main artery, multiple vessel, or complex vessel) or in SCAD causing marked epicardial coronary flow impairment and/or ongoing ischemia, coronary artery bypass grafting should be considered to be the best choice to restore myocardial perfusion."
  - Ye Y et al, American Journal of Emergency Medicine, 2013
- "In STEMI patients with a large thrombus burden and failed manual aspiration, administration of low dose intra coronary thrombolysis is safe and reduces thrombus burden, as a result improving in epicardial flow and myocardial reperfusion."
  - Boura et al, Eur Heart J Acute Care, 2016