



A “nightmare” acute coronary syndrome case in the ...EP Lab

Grigorios Tsigkas, Athanasiou Moulias, Georgios Leventopoulos,
Angelos Perperis, Panagiotis Chronopoulos, Angeliki Papageorgiou,
Georgios Vasilagkos, Periklis Davlouros

- Male, 71 y.o.
- Past Medical History: free
- **Present problem:**
 - **Frequent symptomatic PVCs (PVCs**
burden>20%, occasionally persistent ventricular bigeminy)
 - **PVC morphology:**
 - (+) II, III, aVF → inferior axis
 - LBBB in V1 and transition in V3
 - **Left ventricular outflow track origin**
- **Further investigation and management:**
 - **Cardiac echo:** Normal
 - **Ischemia excluded (MPI negative)**
 - **Failure to control with b-blockers + IC antiarrhythmic drugs**
 - **Decision to proceed to EP study + ablation**



RF ablation at the region of aortomitral continuity



After delivering several lesions → PVCs were temporarily eradicated → recurrence of PVCs during waiting time, suggesting that the true origin was in an adjacent area → more lesions delivered at the adjacent region, the Aortomitral continuity but also at the lower aspect of the Left coronary cusp

- **High Contact force** which instantaneously exceeded even 40 grams
- **No dislodgement of the catheter to the Left main ostium**

The ‘nightmare’ begins....

➤ During the procedure the patient developed:

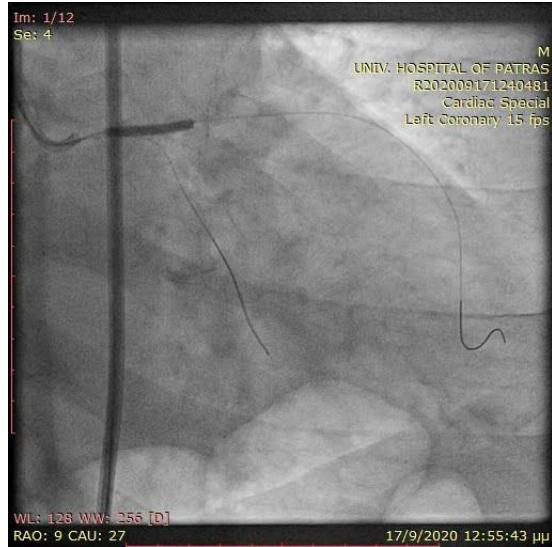
- Chest discomfort
- LBBB
- Hemodynamic instability

➤Emergent coronary angiography was performed...

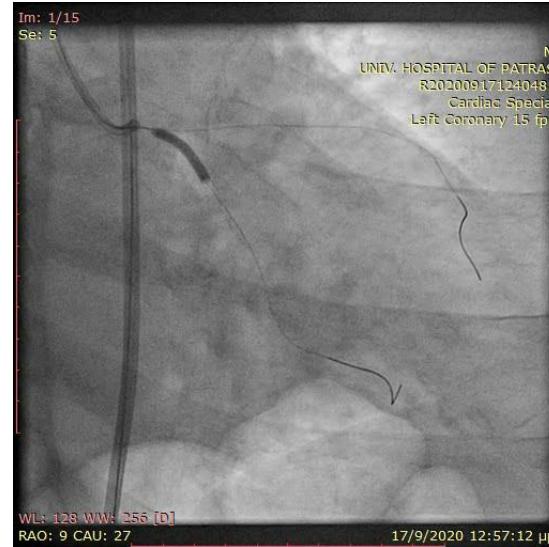


Total LAD ostial + Subtotal LCX ostial occlusion

- An upfront two-stent bifurcation technique was decided (Mini crush)
- Access: 7Fr, right femoral artery



Balloon predilatation LM→LAD

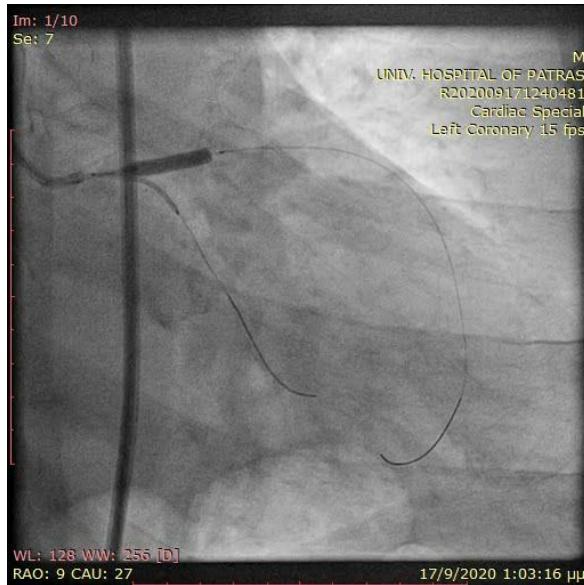


Balloon predilatation LM→LCX

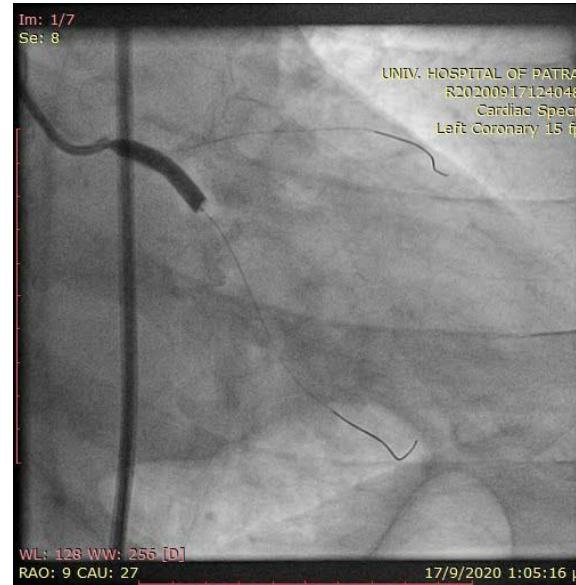


Angio post balloon predilatations

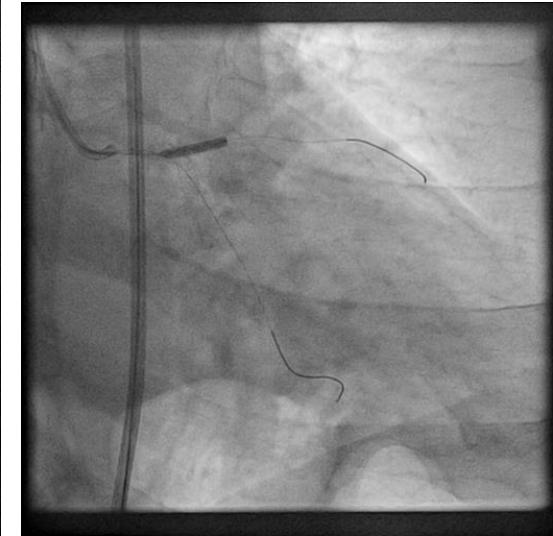
PCI Procedure (2)



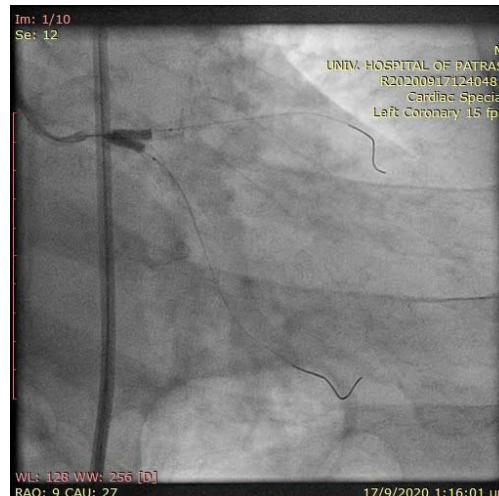
PCI LM → LAD (DES 3,5/18mm)



PCI LM → LCX (DES 4,0/24mm)



Struts' opening to LAD

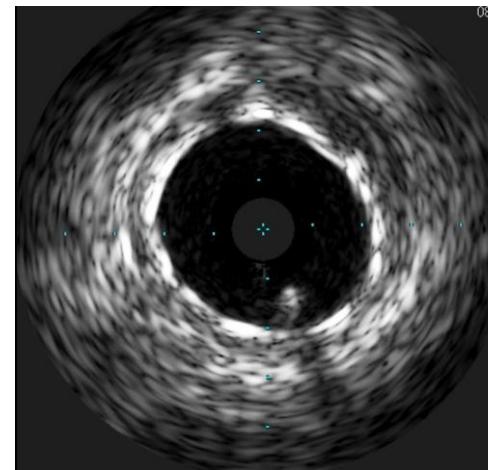
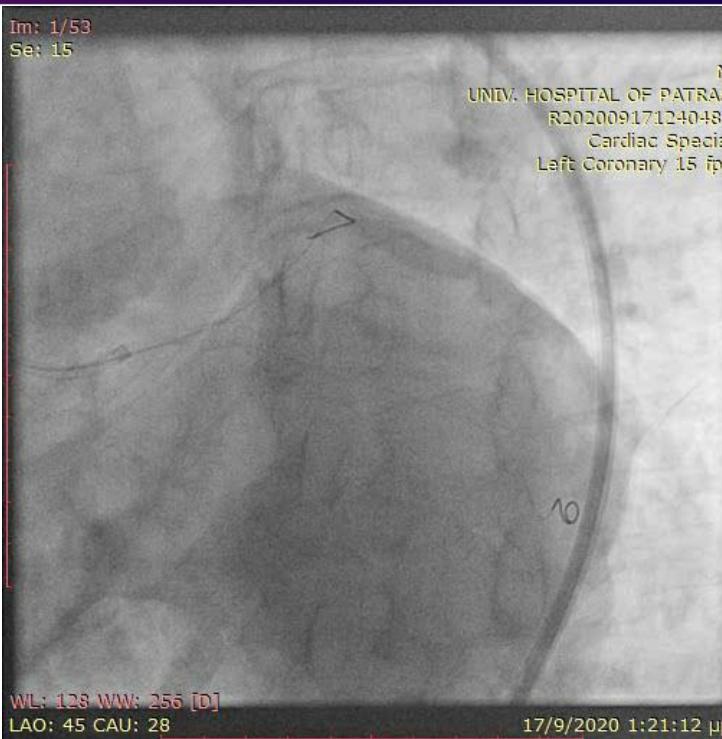


Kissing balloon inflation



POT

Final Angio



IVUS was performed for stents' expansion and apposition assessment

- ✓ Patient asymptomatic after the procedure
- ✓ Hemodynamically stable
- ✓ Admitted to the CCU
- ✓ Discharged after 4 days
 - Asymptomatic
 - LVEF 60%
 - Tx: ASA 100mg, Ticagrelor 90mg b.i.d., Rosuvastatin 40mg, Metoprolol 50mg b.i.d.
- ✓ PVCs still present

- ✓ Our assumption is that the high contact force of the ablation catheter caused damage to the distal left main artery due to conductive heating without direct engagement of the left main ostium.
- ✓ Long sheath use provides stability but also makes the catheter stiffer → contact force may easily exceed normal values → **It is critical to maintain contact force within safe values (ie below 20 grams).**
- ✓ **Support from Cath Lab and collaboration is invaluable.**