LM complication in severely calcific vessels

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Clinical Picture

- 66 Years old male
- Diabetic
- ESRD on regular hemodialysis
- Presented with substernal chest pain radiating to left shoulder and jaw
- Congestive heart failure EF=41%
EKG showed ST depression in V5-V6 with poor R wave progression and Q waves from v1-v4 and **Troponin** elevated

- **Syntax score**: 47.5
- **Euro score**: 4.05%

- We tried to discuss the patient the possibility for surgery but the patient refused

- So we decided to do PCI to RCA as bridge to CABG aiming the patient will change his mind later
1&1/2 month later

- The patient experienced continuous chest pain and refused to do CABG so on the will of the patient he was sent back to cath lab to do PCI to LM, LCX and trial to LAD CTO

- During admission the patient unfortunately experienced sudden collapse and apnea, VT was diagnosed and after cardioversion and CPR for 3-4 minutes the patient was put on ventilator and transferred to CCU.

**EKG** showed ST elevation at anterior leads with marked elevation of **Troponin** to 22 ng/ml
We decided to do PCI to LM-LCX and in case of successful PCI to LAD CTO we do LM-LAD cullotte stenting.

Balloon dilatation with 2.0x20 and 3.0x15

Proximal optimization with 4.0x8.0
Sequential dilatation with 2.0x20, 2.5x20 then 3.0x15

What to do?

- Surgery
- Snair
- Balloon in and pull the stent out
- Crush the stent
• We consulted the CV surgery but it is too difficult to retrieve the stent (because of LM anatomy)
• We used 2 types of snaires but they were not so helpful.
• We tried to pass Saphire 1.0x15 but cannot pass inside the stent
• We also tried to catch the stent using 5-6 ST01 but also failed

The patient was weaned from the ventilator 3 days later and became fully conscious and was discharged at anti-ischaemics and anti-failure drugs with regular follow up at CVOPD
Calcified vessels are one of the most challenging and difficult obstacles that should be managed with caution during doing PCI specially with ESRD patients.

LM PCI in these calcified vessel still so risky and complications like severe dissection, perforation and device dislodgement still inevitable.

In case of severe calcification of LM-LAD segment we could start by doing PCI to this segment 1st although the LM-LCX is so angulated??

Double wire technique could help us from the beginning, however we couldn’t also predict the result.

Using combined technique (as double wire and anchor) was so useful at the end to deliver our stent.

THANK YOU