



Intraprocedural acute stent thrombosis.

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69 years old female.

- **Cardiovascular Risk Factors:**
 - Hypertension.
 - Type 2 diabetes mellitus.
 - Dyslipidemia.
- **Current medications:** losartan, metformin, gemfibrozil.

- **Cardiovascular history:**

- Lateral STEMI (15/11/20). Primary PCI to proximal Cx.
- Multivessel disease: severe stenoses of mid-LAD and proximal diagonal.
- Staged PCI to LAD. (23/11/20).

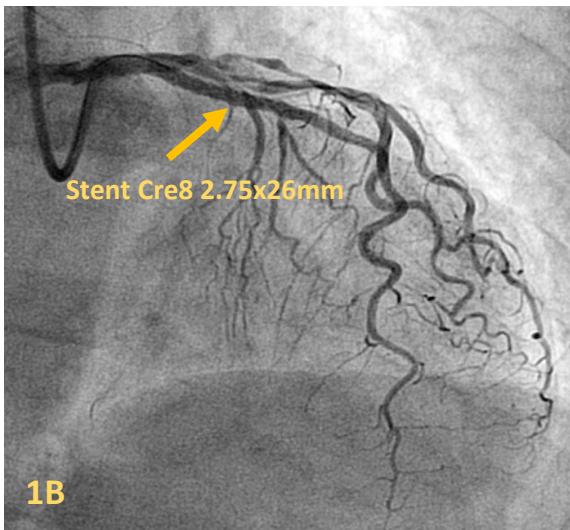
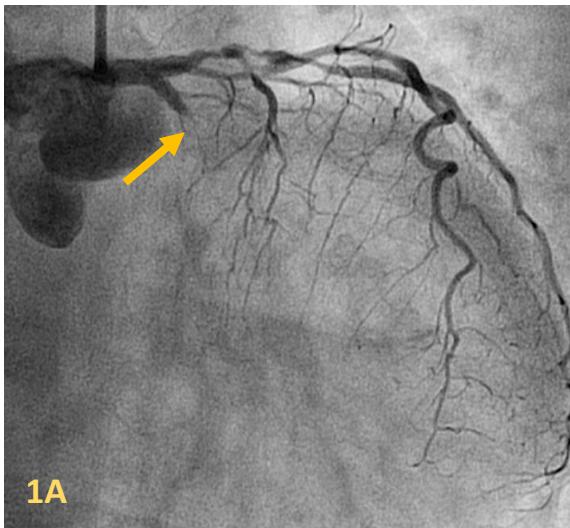
Investigations:

Laboratory: Hb 11.2 g/dl, Plts 290 *103/uL, Creat 0.72 mg/dl, eGFR: 86 ml/min/1.73m².

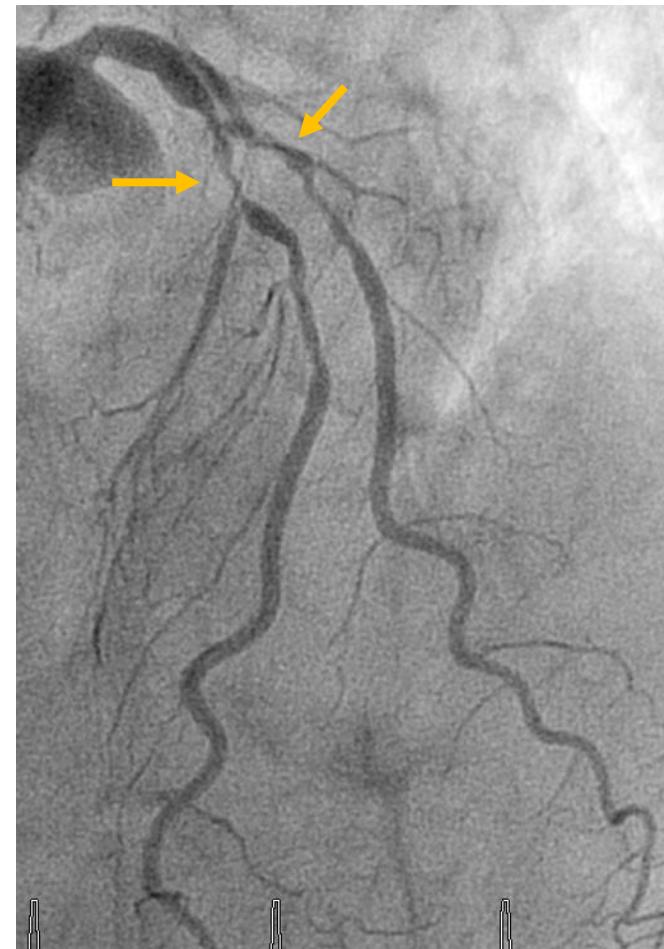
EKG: Sinus rhythm. HR: 70. Narrow QRS. T wave inversion in aVL with ST depression in V3-V5.

Echo: LVEF 56%. Hypokinesia of infero-posterior and anterolateral walls. No significant valvular heart disease.

Baseline angiography and previous PCI results.



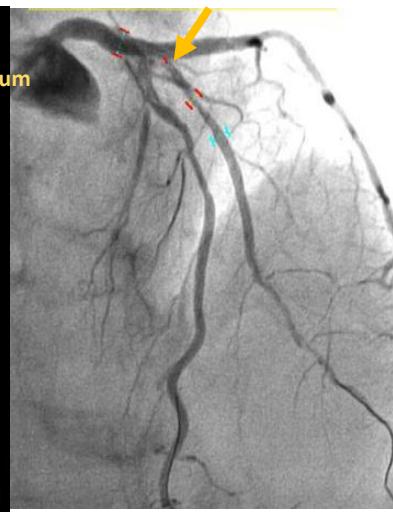
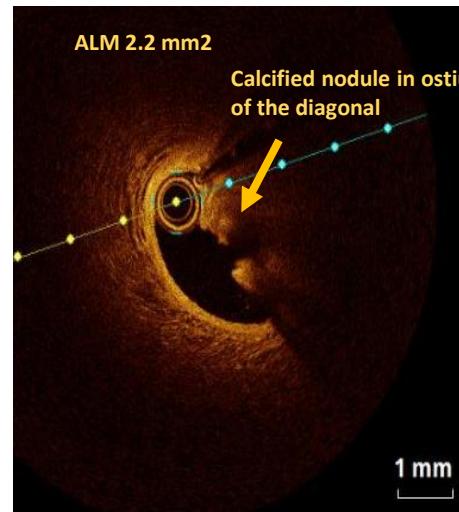
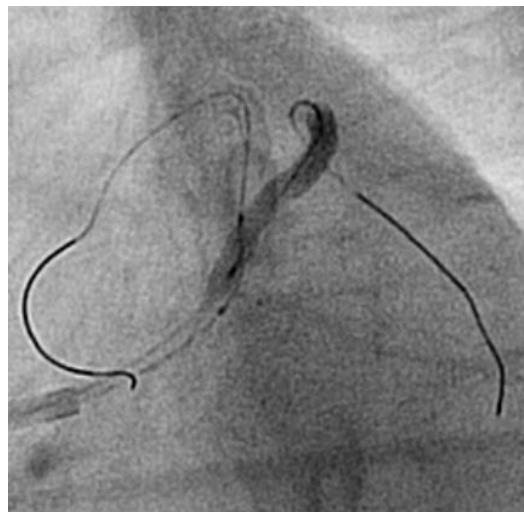
1A. Occlusion of proximal CX-Culprit lesion.
1B. Primary PCI result (15/11/20).



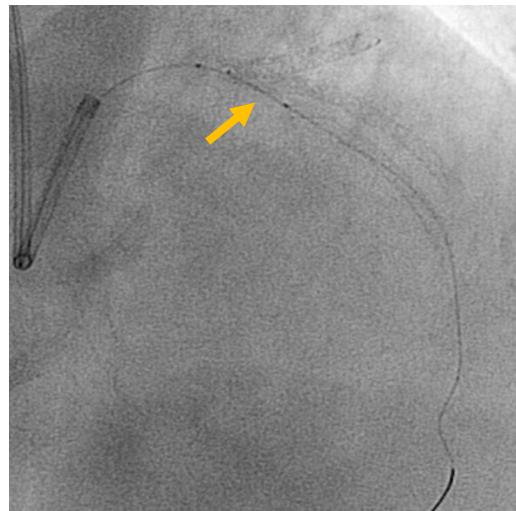
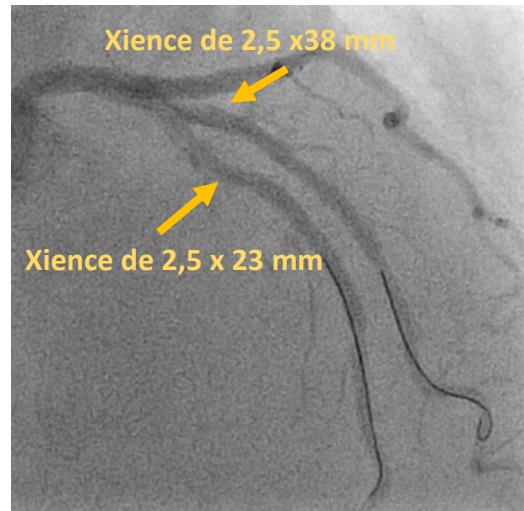
- Dual LAD system.
- Complex bifurcation: Severe stenoses of mid-LAD and proximal diagonal.

LAD: left anterior descending
Cx: circumflex.

Bifurcation technique, DK-crush. Initial results.



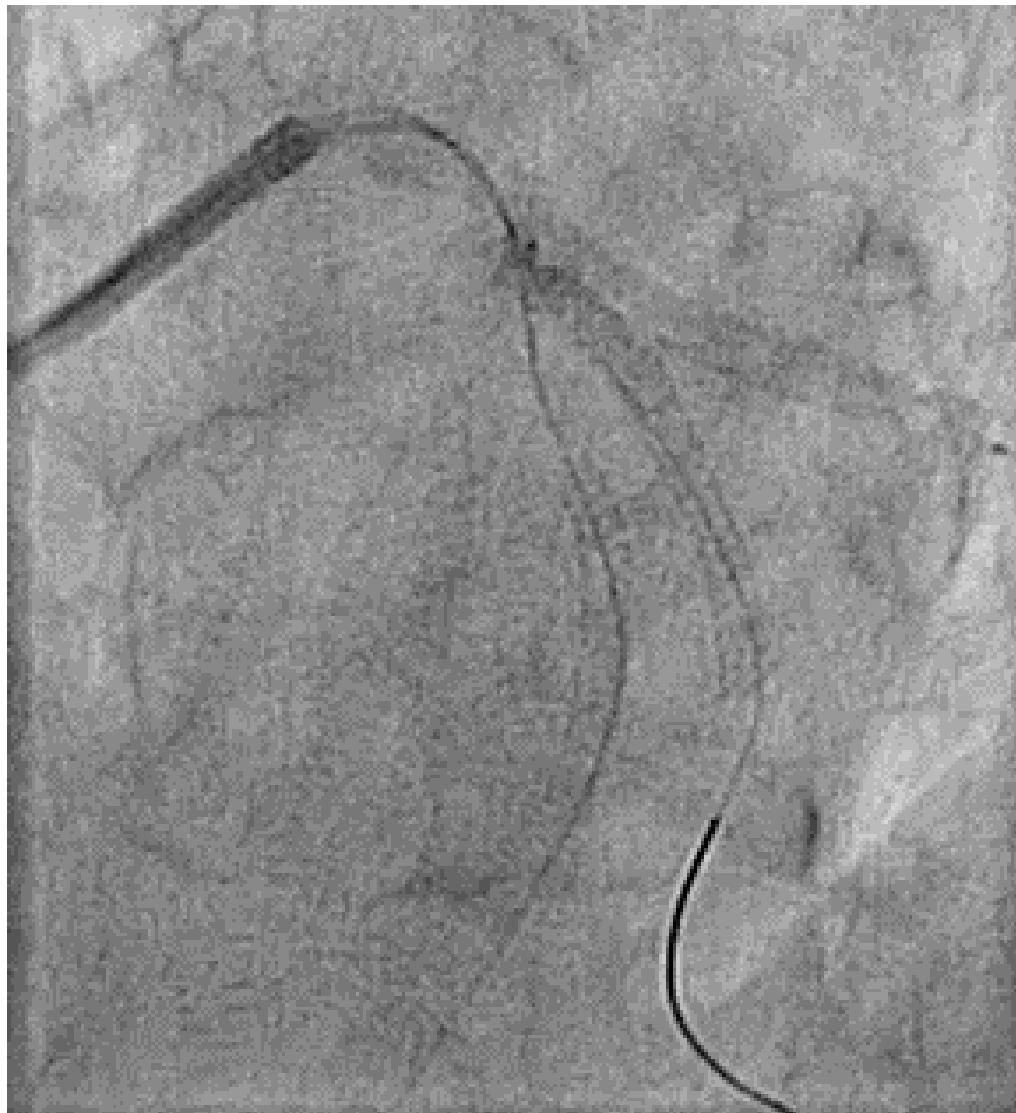
Complex bifurcation:
• OCT and corregistration guided procedure.
• Calcium Modification with cutting balloon.



Complication

After diagonal stent and crush with balloon of 2.5x15mm, inability of advancing stent and low profile balloons.

Procedural complication: acute stent thrombosis.

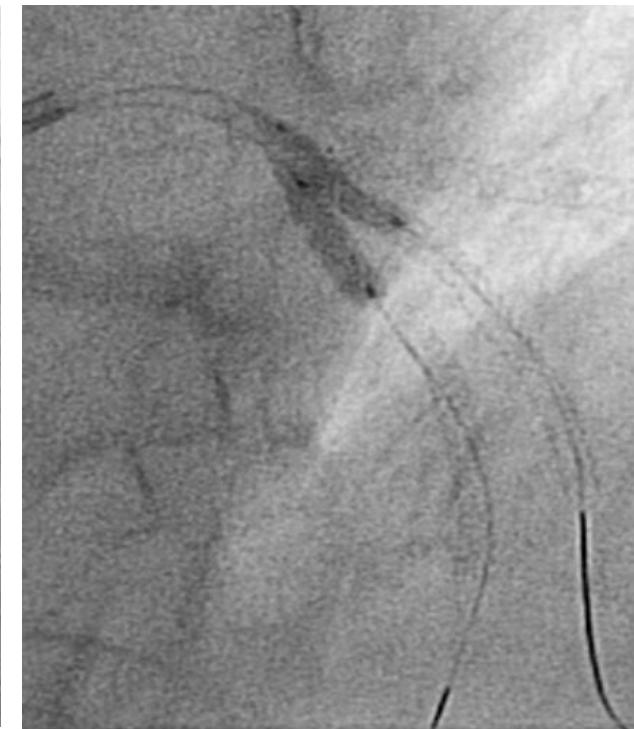
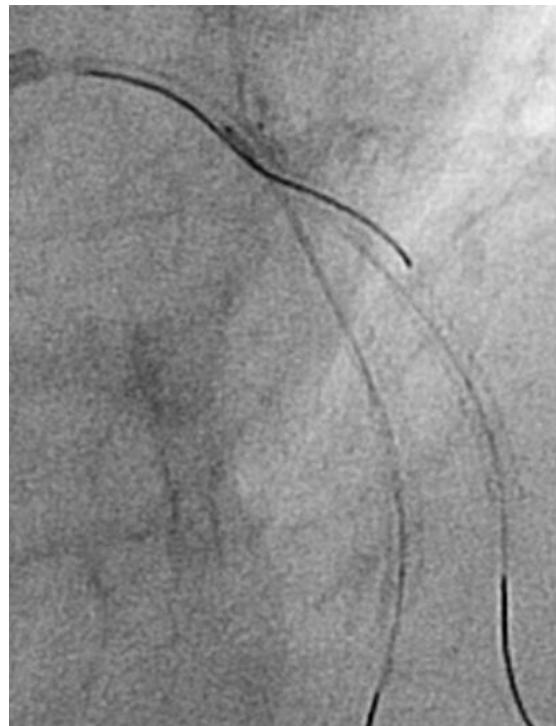


Intraprocedural acute stent thrombosis: with ST elevation, chest pain and hemodynamic instability.

Multiple factors:

- Dual antiplatelet therapy with aspirin and clopidogrel: Previously treated with Prasugrel. Downgraded because of epistaxis.
- Severe calcification of target artery and underexpansion of stents.
- Subtherapeutic heparin due to poor calibration of ACT machine.

Management of acute stent thrombosis

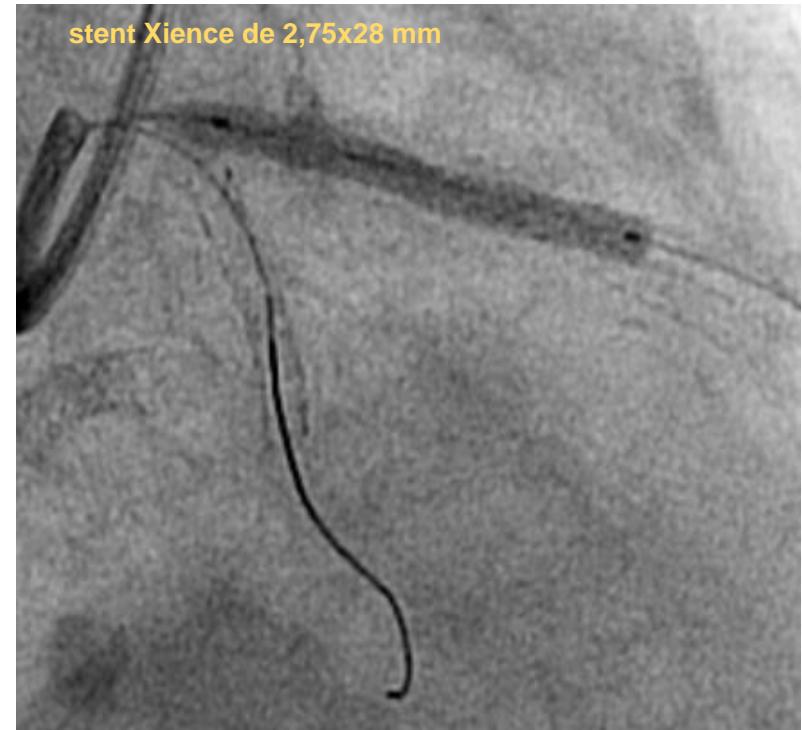


- LAD recrossed with dual lumen catheter and Sion Blue extrasupport and dilation with balloon of 3x12mm.
- Dual lumen microcatheter assisted wiring of diagonal (Sion).
- Kissing balloon.

Management of acute stent thrombosis



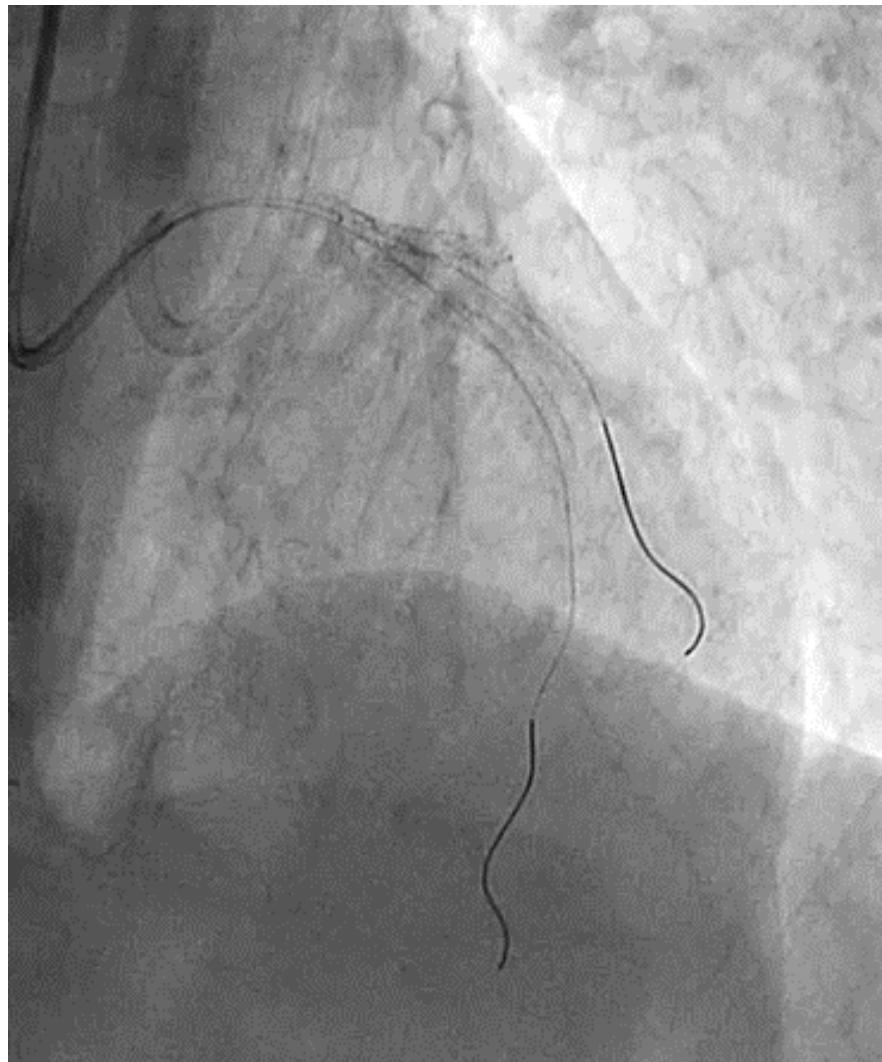
Thromboaspiration.



Stent to mid-proximal LAD.

- POT.
- Recross wire to diagonal.
- Final kissing balloon.

Final angiographic result



Restored flow in both vessels with resolution of clinical manifestations.

Conclusions

- Careful planning of intervention.
- Usefulness of intracoronary imaging and calcium modification techniques.
- Careful management of devices and procedural materials which may distort the bifurcation.
- Optimizing antiplatelet therapy according to patient profile.
- Careful intraprocedural monitoring of ACT and heparin dosis.