LONG CTO AND DRUG ELUTING BALLOON: THE NEW FRONTIER?

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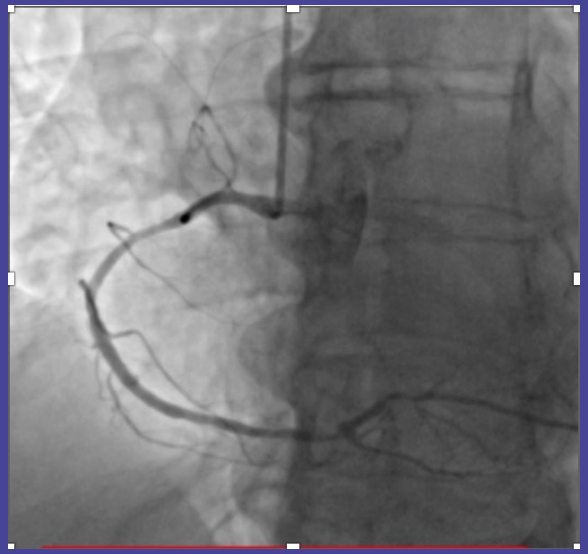
MULTI-LEVEL CTO COURSE
JUNE 30TH - JULY 1ST & 2ND
Palais de la Méditerranée, Nice, France
7TH EDITION
MLCTO
SHARING KNOWLEDGE

PATENT HISTORY

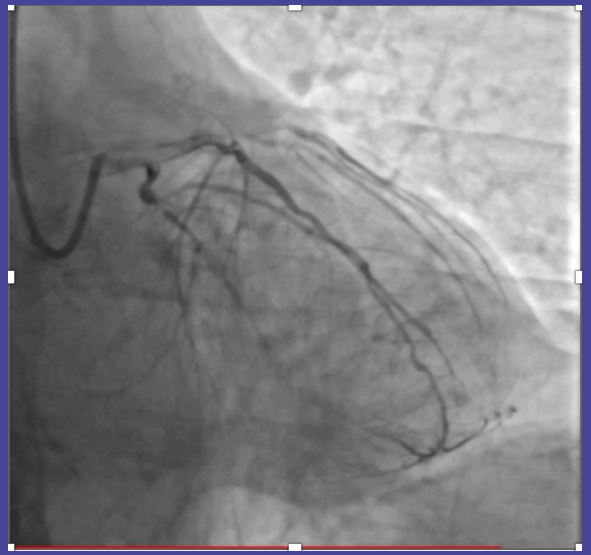
- 75 year old patient, angina CCS III, severe ischemia involving infero-postero-lateral wall at miocardial scintigraphy;
- Previous percutaneous coronary intervention (PCI) on right coronary artery and unsuccessful attempt of circunflex chronic total occlusion (CTO) treatement (02/22);
- Referred to us for complete revascularization of circunflex CTO because persistence of angina CCS III (06/22);
- Minor stroke while was waiting for our call (07/22);
- Was admitted the 10/22 after neurologic evaluation and clearance;

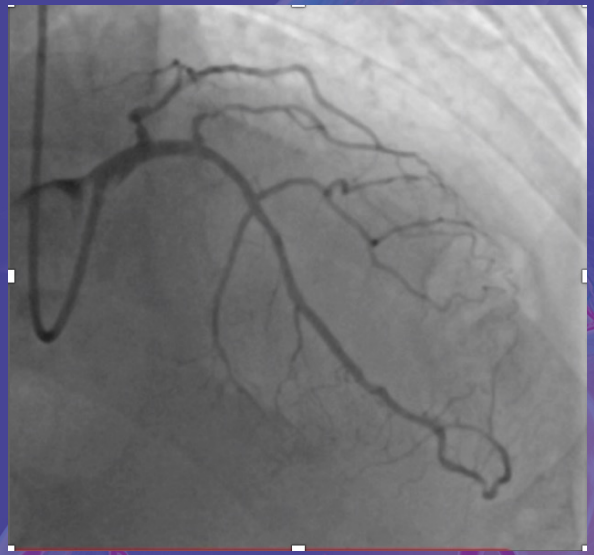
CORONARY ANGIOGRAPHY



RIGHT CORONARY ARTERY

Good result of the previous PCI on mid tract and moderate atheromasia at the level of the crux and mid PL

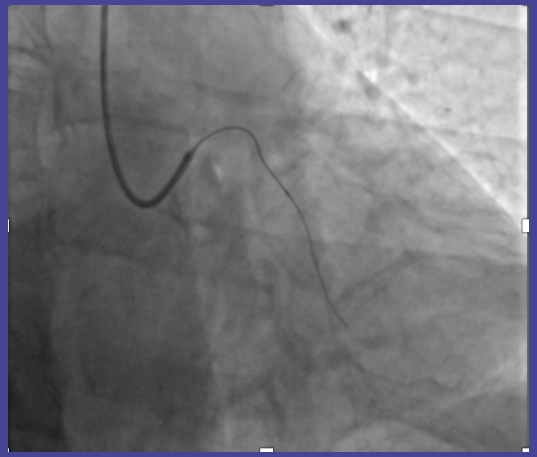




LEFT CORONARY ARTERY

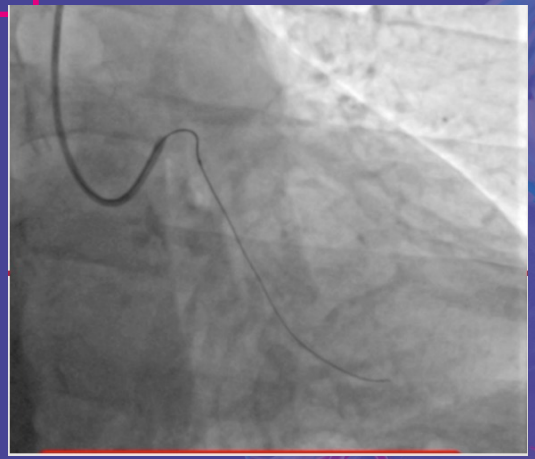
Tortuosity and moderate stenosis in the first tract of the circunflex followed by long CTO (6 cm) starting immediatelly after the origin of the first and most important obtuse marginal branch that is affected by a critical stenosis at the ostium and first tract. Diffuse Irregularity in the discending anterior artery

PROCEDURE I



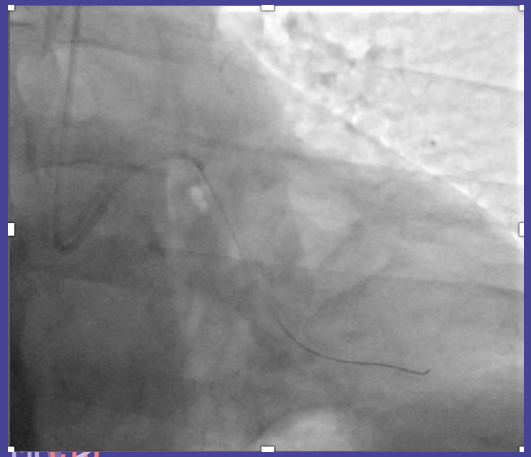
1

Guide EBU 6fr 4
Micro Corsair Pro XS
Sion blue to bring the micro throught the tortuosisity and Giaia third to puncture the proximal cap.
Down grading to gladius EX to nagivate the plaque in the subintimal space



2

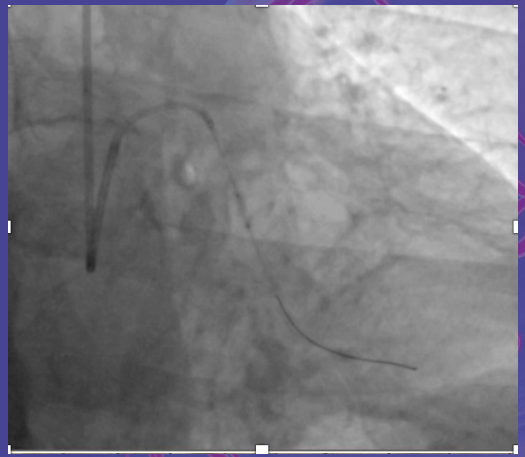
Re-entry in the throught lumen with gaia third



3

Corsair XS got stuck and a balloon attempt dilatation with 1,2x8 was unseccessfull due to undeliverabity, also with the support of Guide Extension (Mother in Child tecnique)
Finally the CTO was successfully crossed with a Caravel 135 and an extrasupport wire could be positioned at the distality of the III marginal brunch.

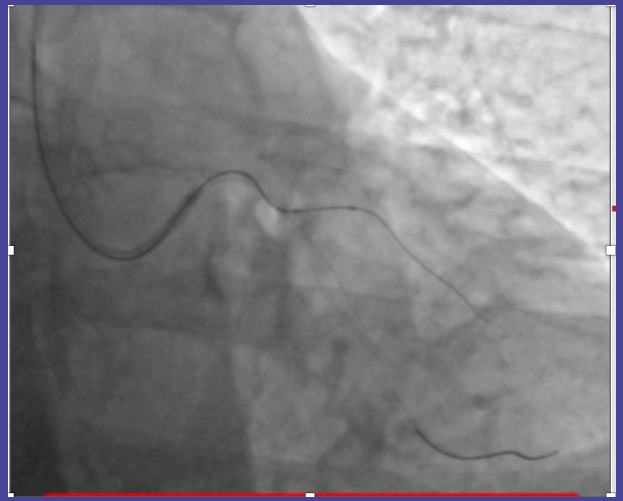
The movie demontrate the tension of the system during the crossing with the catheter and the exstension that are in the aorta



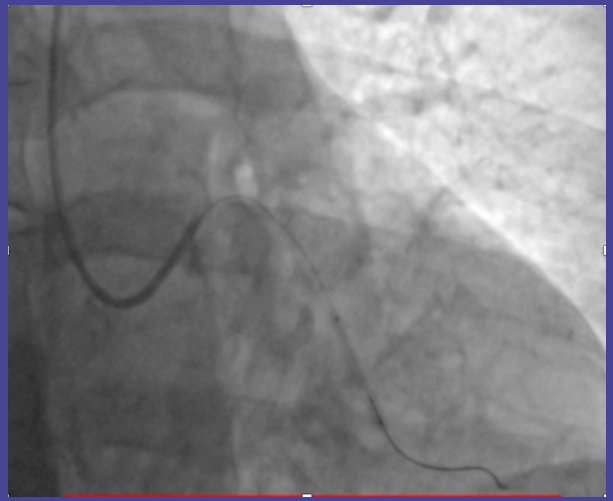
4

Granadoplasty with a 2x8 mm balloon was performed to allow shockwave balloon to cross

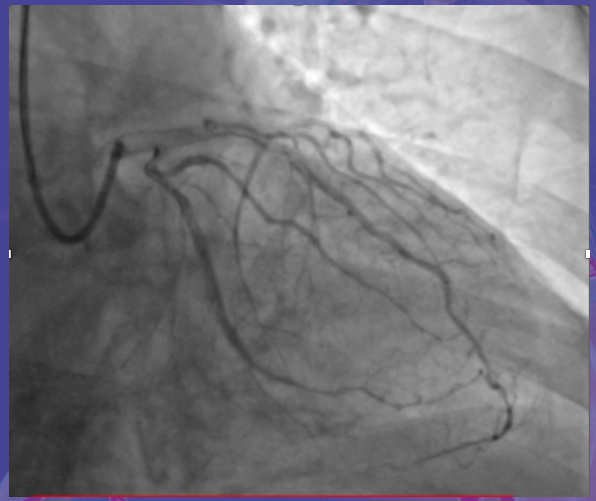
PROCEDURE II



- 2,5x15 mm NC balloon
- 2,5x12 mm shockwave on marginal and circunflex
- 3x15 mm NC balloon all the way

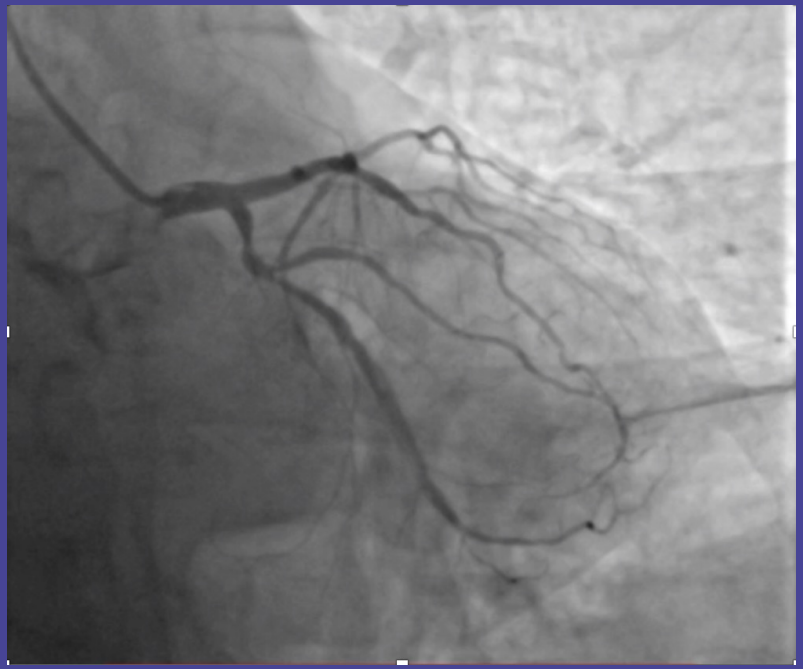


- Two 3x27 mm Drug Eluting Balloon (DEB) on prox and mid circunflex
- 2,5x15mm drug eluting balloon on marginal and distal circunflex



- Final result without stenting
- Small non occlusive dissection of the circunflex
- Bifurcation with marginal not compromise
- TIMI III flow in alla branches
- An angiographic control at 3 mounts was planned

CONTROL AT 3 MOUNTS

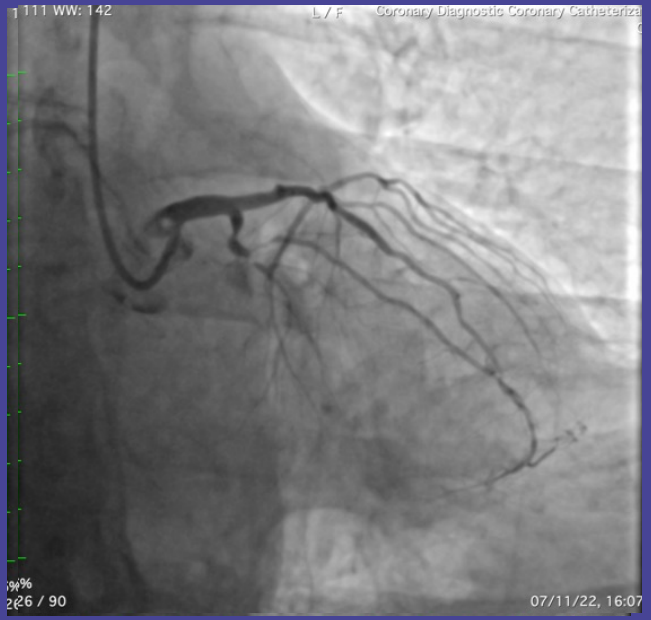


- Angiography demonstrated patency of the artery and TIMI III flow in all branches;
- The vessel is significanly increased in diameter as a result of early remodelling;
- The dissection, resulted from the previous intervention, was more evident, growing with the vessel as part of the vessel healing;
- The patient resulted positive to Covid-19 swab;

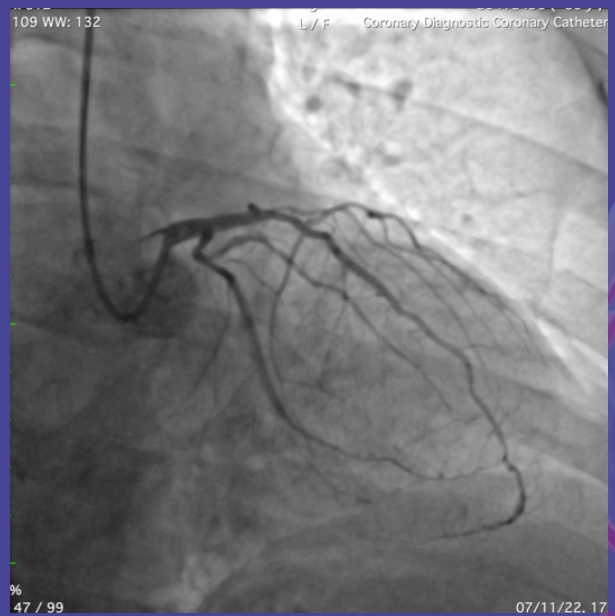
CONCLUSION I

- ✓ Drug Eluting Balloon was successfull in the treatment of long and hard CTO that needed granadoplasty and shockwave.

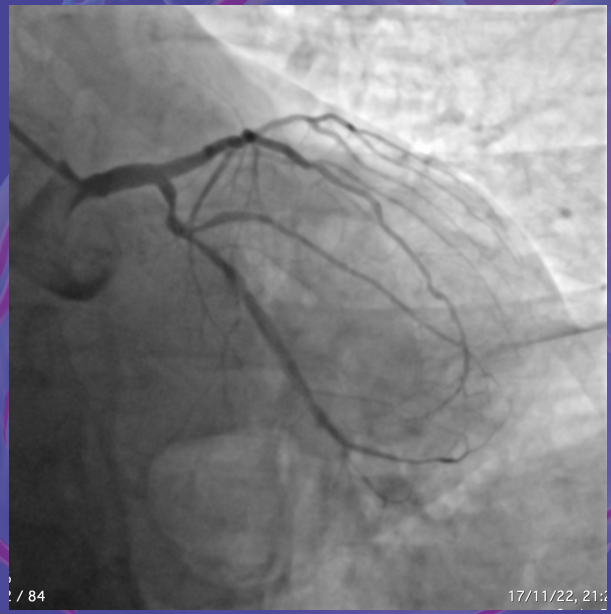
DIAGNOSTIC



PROCEDURAL RESULT AFTER DEB



ANGIOGRAPHY AT 3 MOUNTS



CONCLUSION II

- ✓ Drug Eluting Balloons (DEB) are the new frontier of the treatment of long and diffuse coronary stenosis but there is reticence in their use in the context of complex CTO;
- ✓ The approach to long and diffuse coronary disease causing stenosis is a very attractive strategy since allow to the artery to healing and recovery avoiding too much foreign material;
- ✓ We have to take into account this concept also in the CTOs contest!