

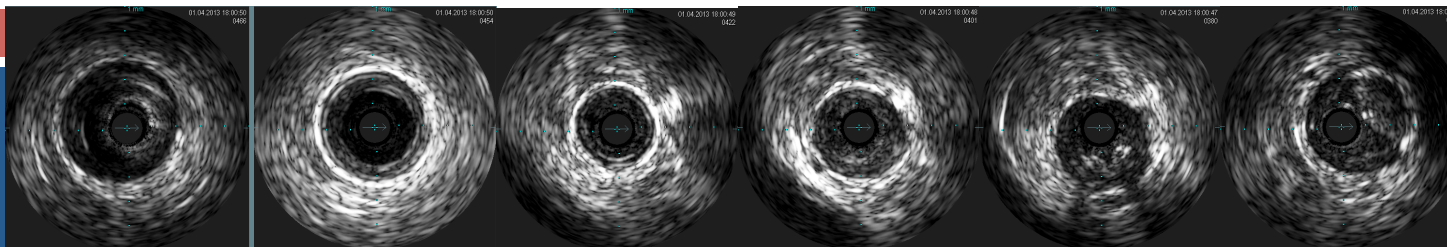
Step ONE —RCA PCI

- ❑ Calcified chronic Total occlusion (CTO) from the mid-RCA.
- ❑ Under support with **6F AL 0.75 guiding catheter**, stepwise anterograde wiring was done by using **Filder XT GW**.
- ❑ After the successful wiring (IVUS during procedure) , pre-dilation was attempted in the m-RCA CTO. Successful pre-dilation using **Tazuna** (2.0x10mm & 2.5x15mm) balloons from middle to distal RCA was done.

Strategy ONE

- After pre-dilation, distal RCA flow was visualized. Complete recanalization was achieved by implanting and overlapping **two Resolute Integrity RX stents** (2.5x18mm & 3.0x38mm) from mid to distal RCA.
- Final RCA angiogram showed excellent distal run-off.

IVUS-RCA



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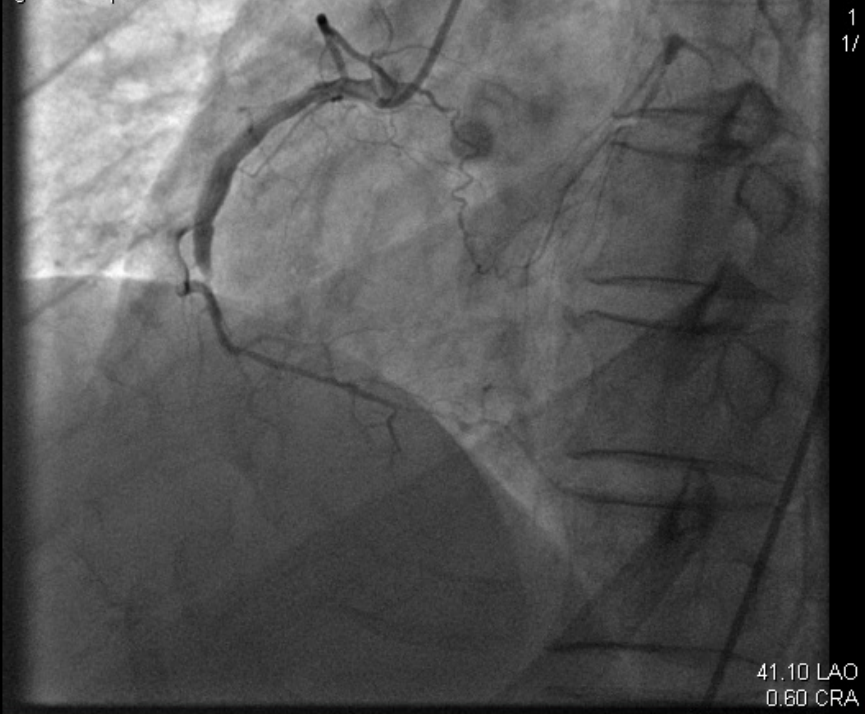
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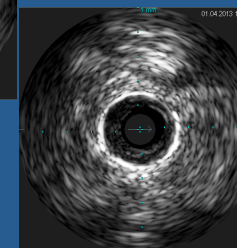
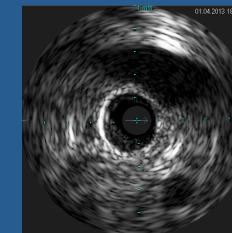
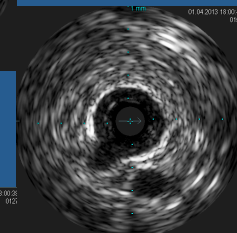
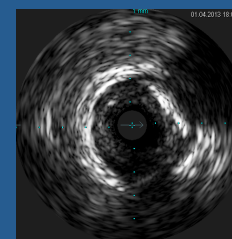
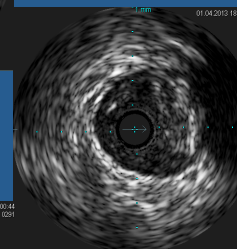
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41.10 LAO
0.60 CRA



Step TWO——Retrograde

- The LM was engaged with **7F EBU3.75 guiding catheter**, and the RCA engaged with a **6F JR 4 guiding catheter**.
- CTO from the LAD ostium, the distal LCx was filled through the collateral channel of the LAD.
- Try wiring with Guiding wires (**Wizard 78** and **Filder XT** and **Conquest Pro**) support with **ev3 microcatheter** through the collateral channel from the distal LCx to LAD but failed to get into the true lumen of LAD.

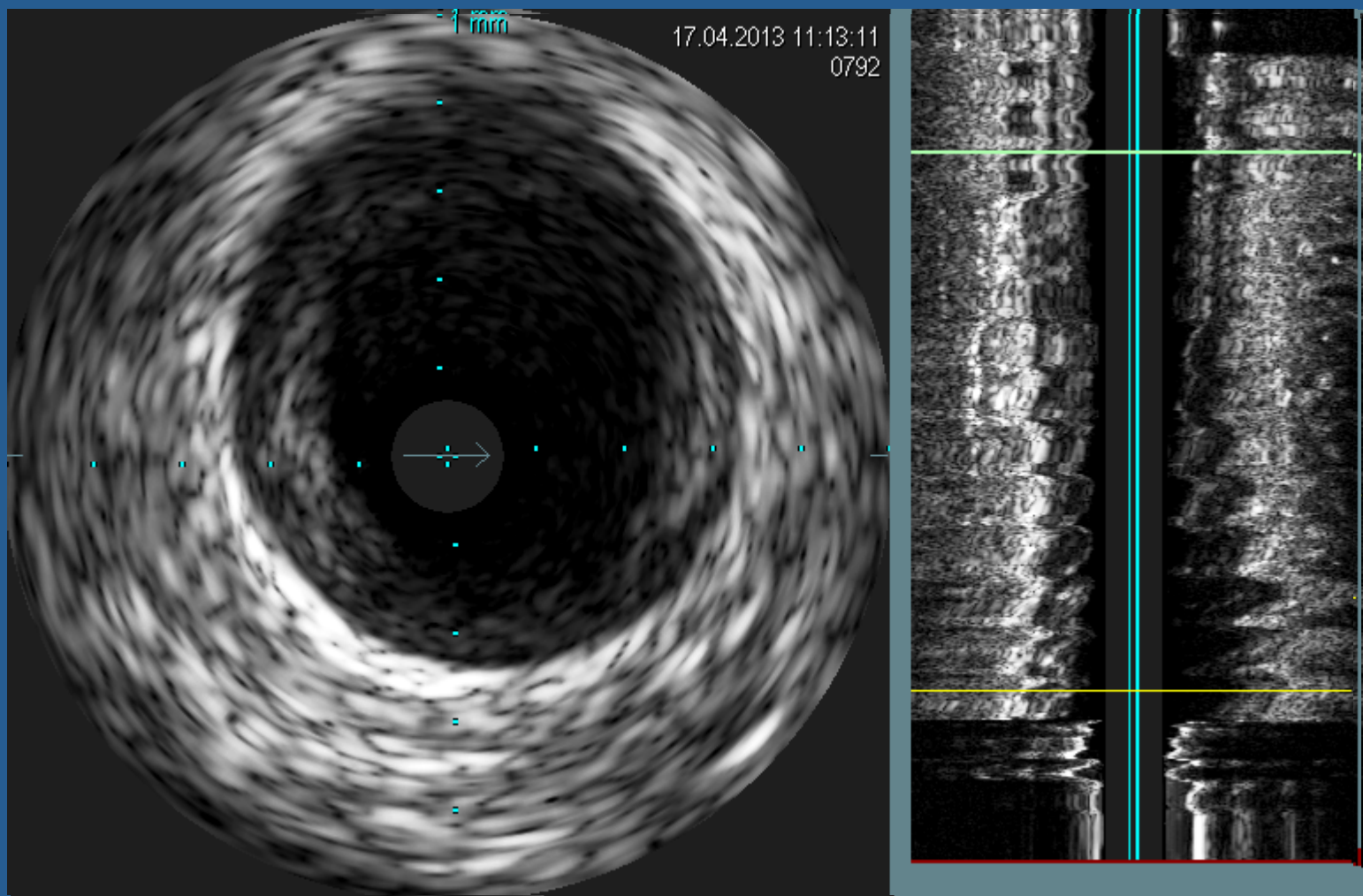
Step THREE——Antegrade

- Successful engagement of the **7F EBU 3.75 guiding catheter** in the LM and advance the **Conquest Pro Guidewire** with **ev3 microcatheter** to the distal part of the ostium of LAD-CTO.
- **Tornus 88Flex (2.6F)** to the distal part of LAD over **the Conquest Pro** and successful to cross the lesion.
- Pre-dilation using **Tazuna** (1.5x15mm & 2.5x15mm) balloons from ostium to middle LAD was done.

Step THREE——Antegrade

- After pre-dilation, distal LAD flow was visualized. Complete recanalization was achieved by implanting **Biomatrix stent** (2.5x33mm) at mid-LAD and **Resolute Integrity RX stent** (3.5x30mm) from ostium to proximal LAD.
- Final LAD angiogram showed excellent distal run-off.
- **So, it was possible to perform PCI as usual by antegrade guidewire.**

IVUS-LAD



CTO – current rates

- 1997-1998 NHLBI Registry CTO – 15.6 % PCI
- 1998-2000 ACC Registry CTO – 12 % PCI
- 2004 NHLBI Registry CTO – 5.7 % PCI
- 2005-2006 EuroHeart Survey * CTO – 28.6 % elective coro
12.2% urgent coro
- 2006 – EuroCTO Club CTO – 12% (7.8-17.5%) PCI
Success rate: 75.1% (62-85%)
- 2011- USA YALE **

6122 consecutive patients underwent elective PCI at a single Centre (October 2003 to May 2010), 836 (13.7%) for CTO. 572 (68.4%) CTO procedures were successful. Coronary stents were implanted in 96.9% (mean 2.3 ± 0.1 stents per patient, 70% drug eluting).

*European perspective in the recanalisation of Chronic Total Occlusions (CTO):

**SUCCESSFUL RECANALISATION OF CHRONIC TOTAL OCCLUSIONS IS ASSOCIATED WITH INCREASED LONG TERM SURVIVAL