

Successful IVUS guided antegrade fenestration reentry two months after investment

Marouane Boukhris MD, FESC, DRCPSC CHU Dupuytren, Limoges, France

Successful IVUS guided antegrade fenestration reentry two months after investment

Marouane Boukhris MD, FESC, DRCPSC

CHU Dupuytren, Limoges, France

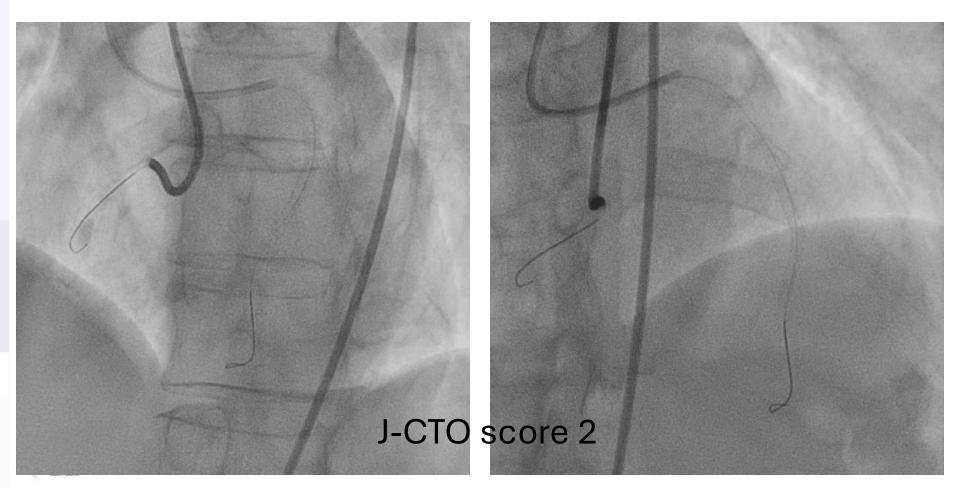


Case Summary

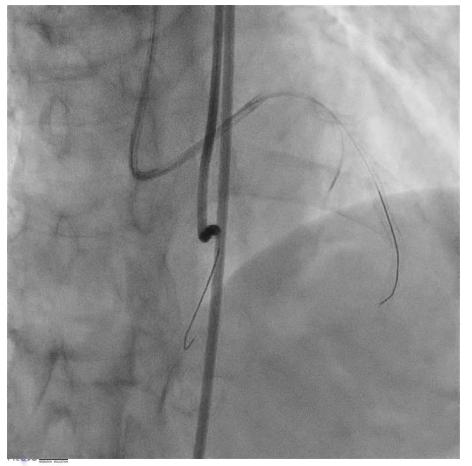
- 69 year-old woman
- Ex smoker
- Prior PCI of LCx
- Clinical presentation: anterior STEMI
- PCI LAD-D1 (inverted TAP technique)
- Mid RCA CTO
- TTE: preserved LVEF
- eGFR: 61ml/min

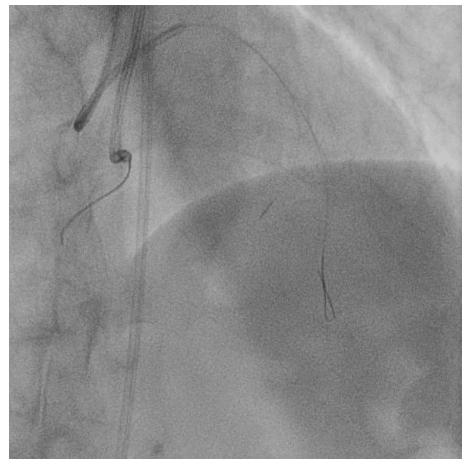


• Dual access: RR 6Fr, RF 7fr

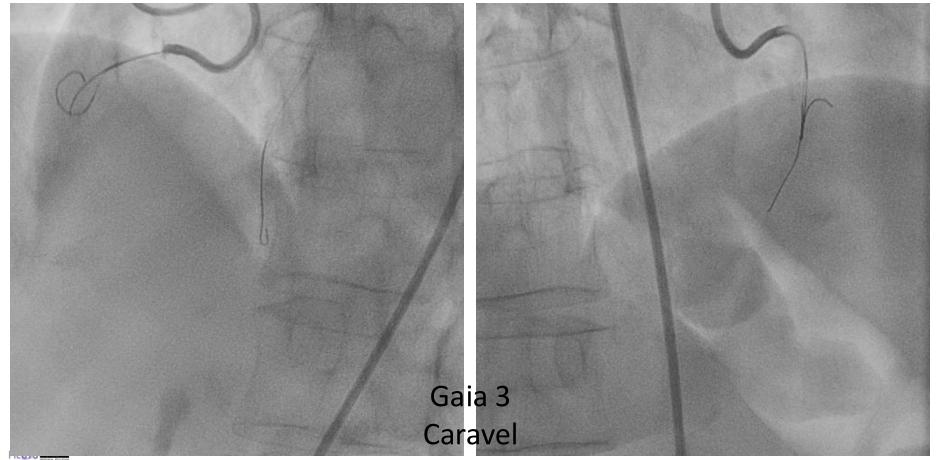


Retro first option: failure of crossing 2 different septal branches

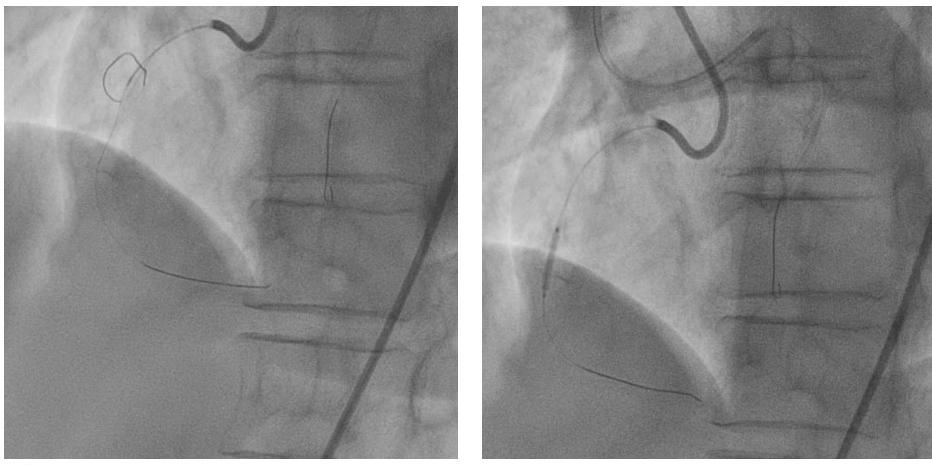




Antegrade approach



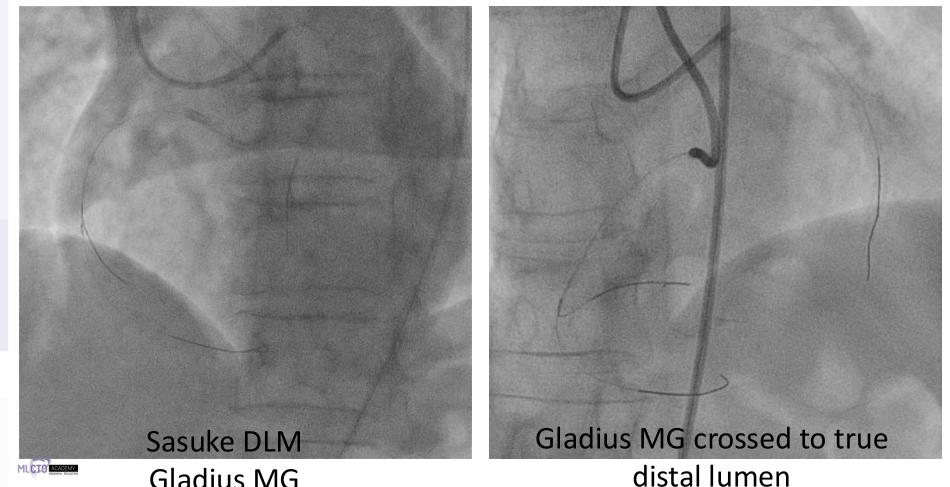
Crossing in side branch







Antegrade Approach

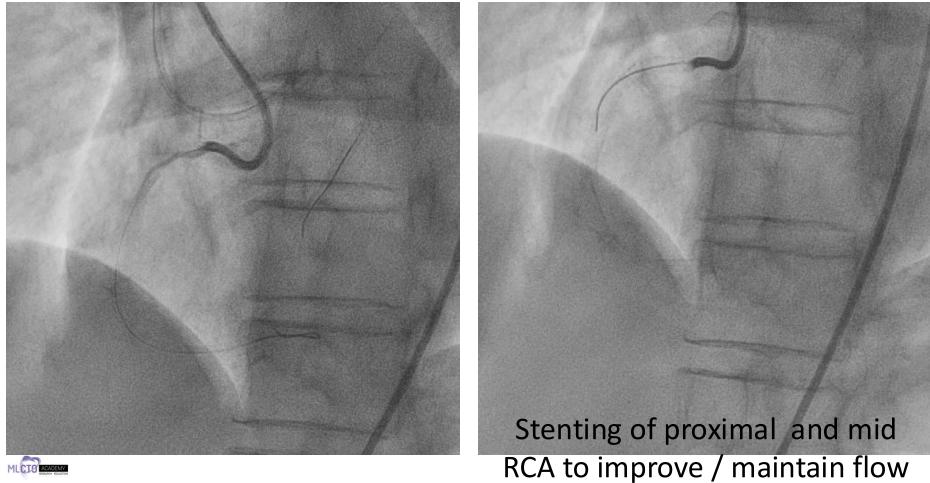


However

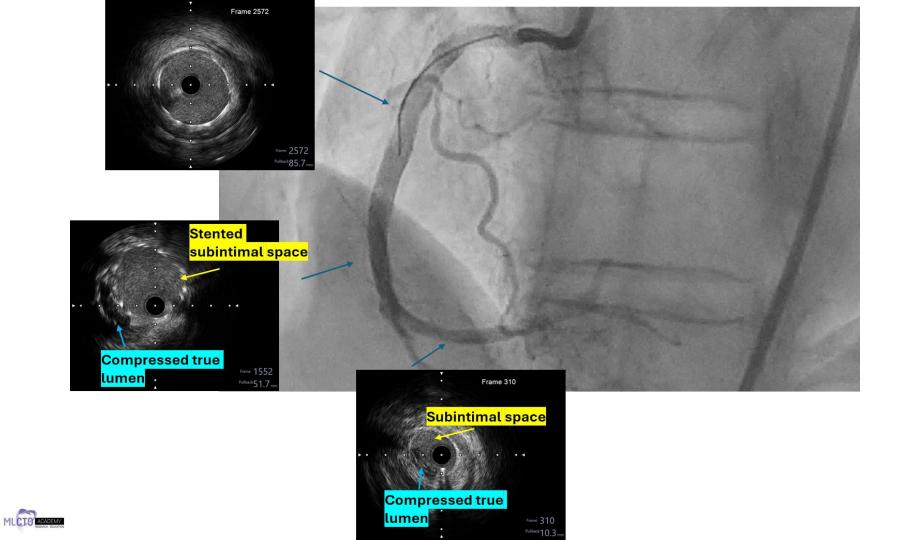
- Guidewire position lost when retrieving Sasuke
- Inability to regain position ...
- Large hematoma



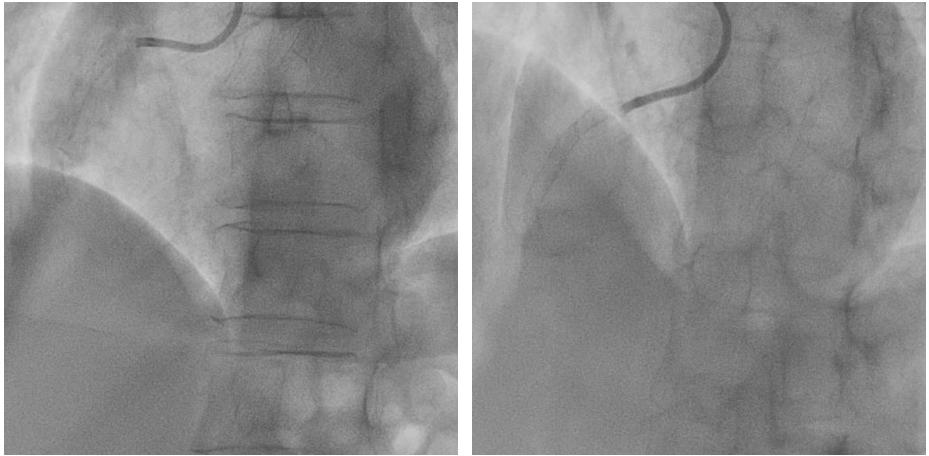
Investment







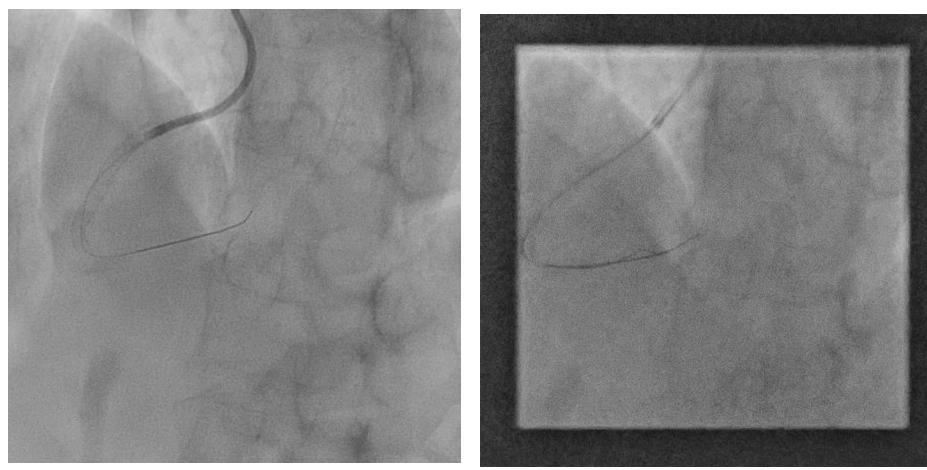
2 months (8 weeks) later ...





TIMI 3 flow in PL

Failure to cross !!!!

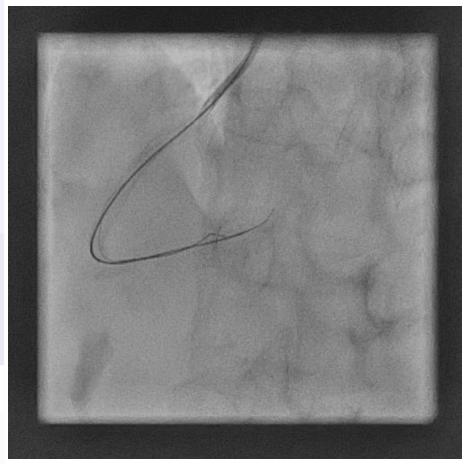


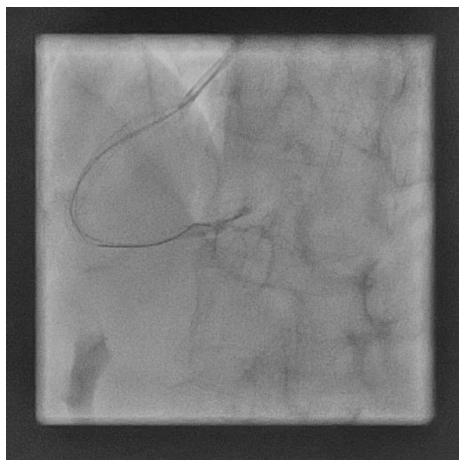


Sion Blue

Caravel, SUOH03

Failure to cross and flow impairment



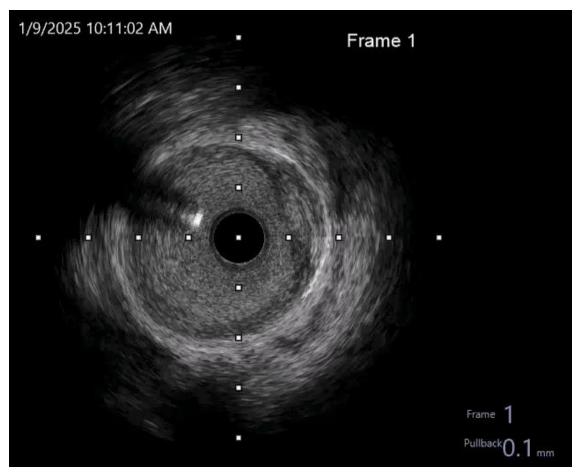




Caravel, Gaia 2

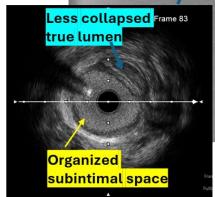
Flow impairment

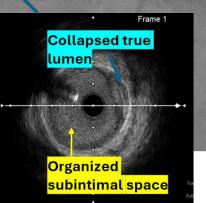
IVUS assessment





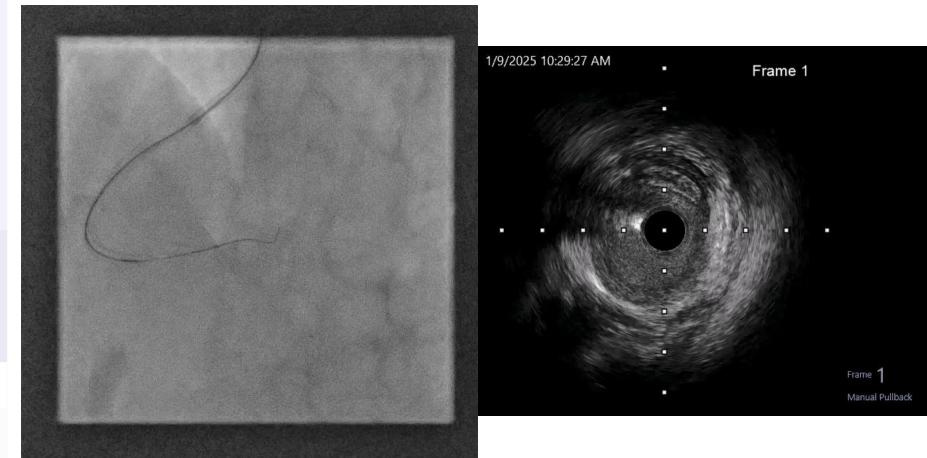
Better position to attempt reentry





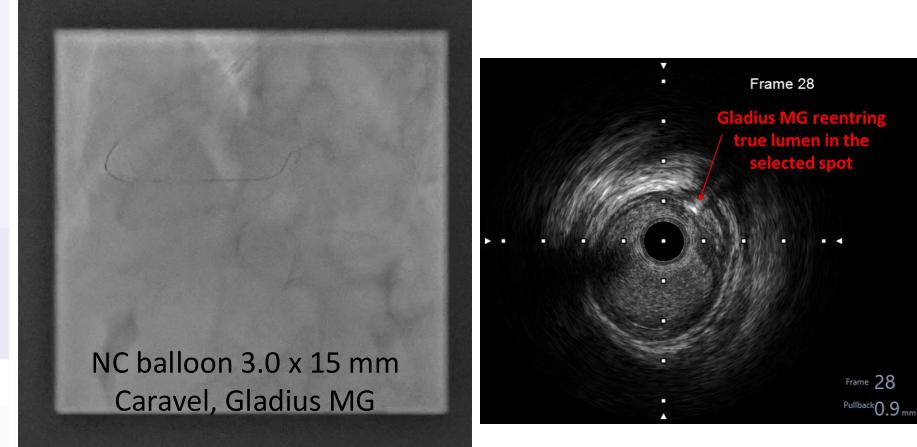


Failed attempt of IVUS guided reentry



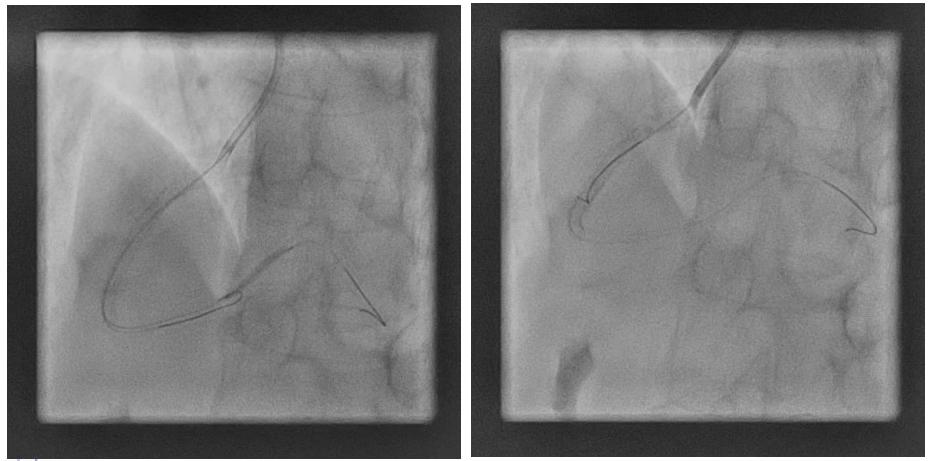


Antegrade fenestration reentry (AFR) in the position selected by IVUS



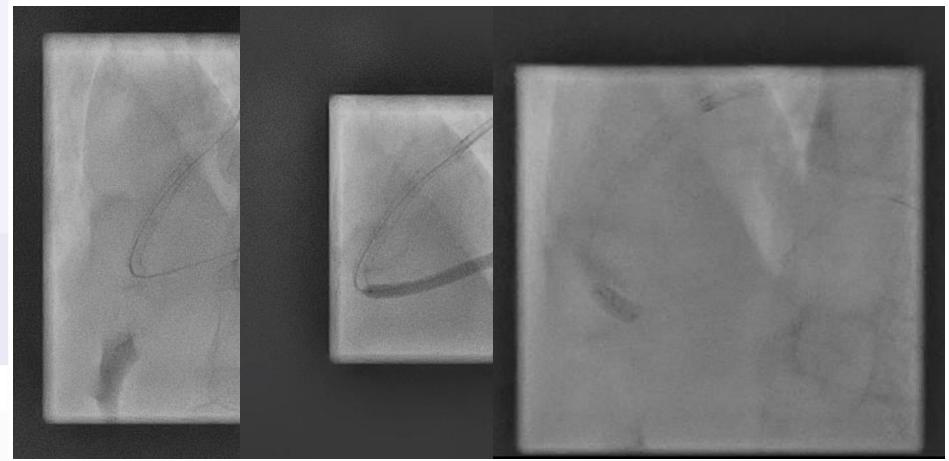


Predilation



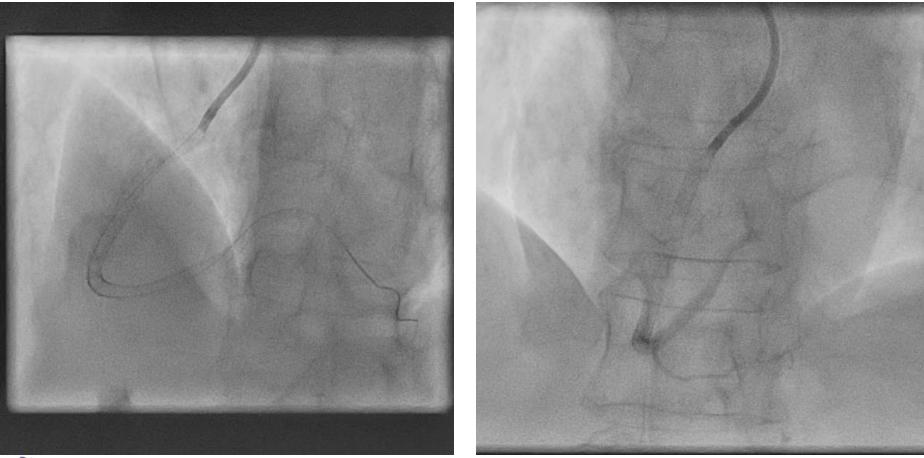


3 DES implantation





Final result





Take Home Messages

- Better avoid extensive ballooning in case of investment procedures, particularly distally to the CTO
- In absence of clear algorithm, IVUS assessment when reattempting CTO PCI is key to determine the strategy to adopt after investment
- AFR could be a valuable option to reenter true lumen even 2 months after investment procedure
- IVUS might help in the selection of the appropriate location where reentry could be attempted

