

**Overcoming Challenges in Complex PCI with a Dedicated
Novel Balloon that Meet Clinical Demands**

Overcoming Complex PCI Challenges

LIM Soo Teik

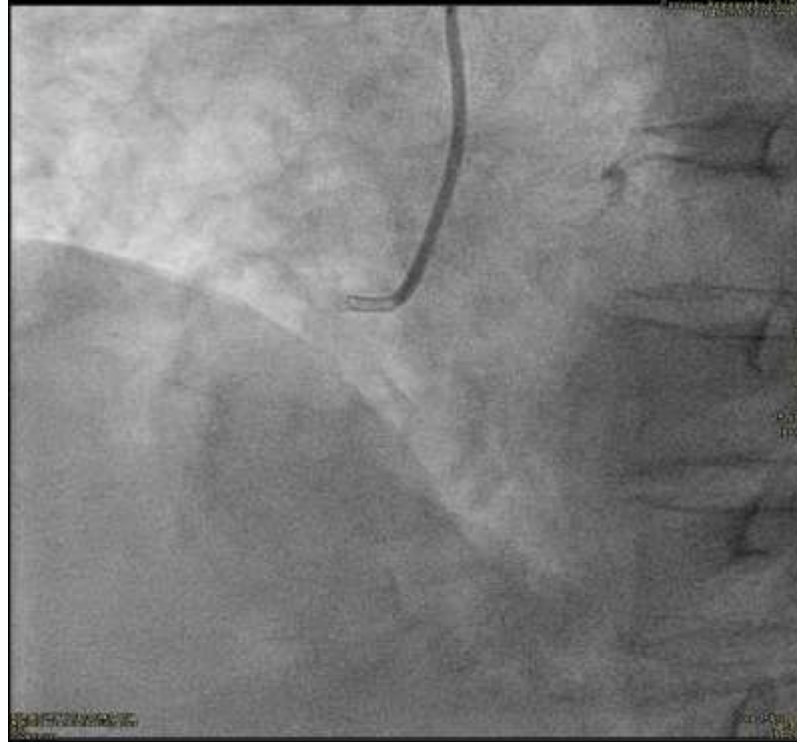
National Heart Centre Singapore

Disclosure

- Educational grant from **Terumo**
- Educational / research / conference support from **Asahi, Kaneka, Nipro, Medtronic, Orbus Neich, Alvimedica, Boston Scientific, Actelion/J&J, Abbott Vascular**

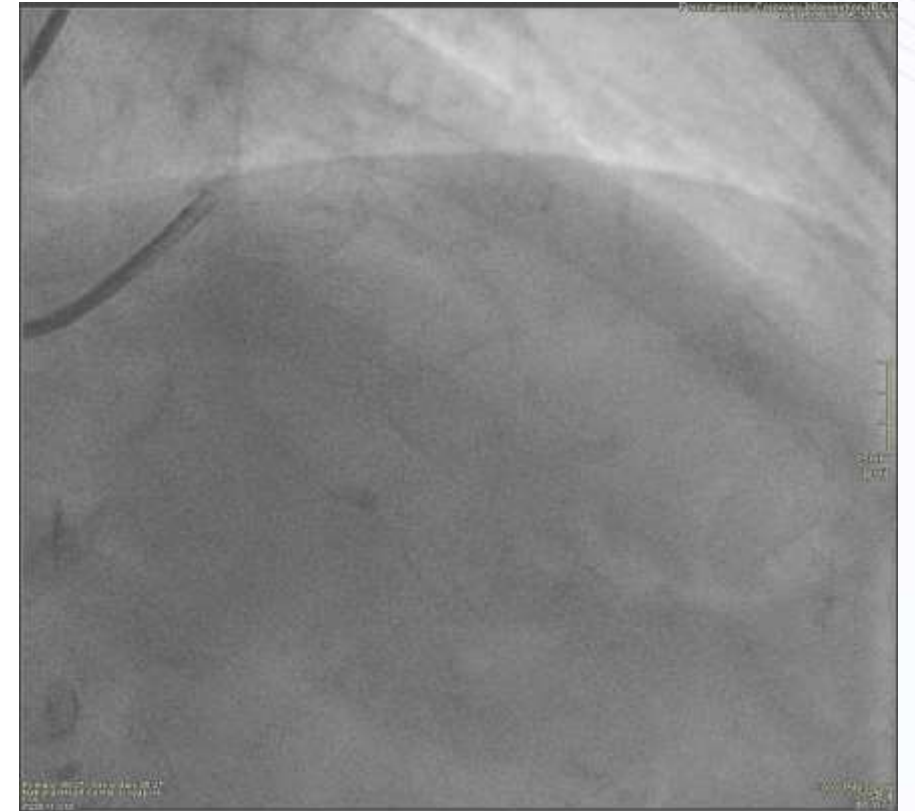
Case 1

- **80 y.o** female
- DM, hypertension, hyperlipidemia
- CKD stage 3 (eGFR 44)
- **Inferior-RV MI** (Feb 2023)
 - TVD
 - PCI/DES (x2) to RCA



Case 1

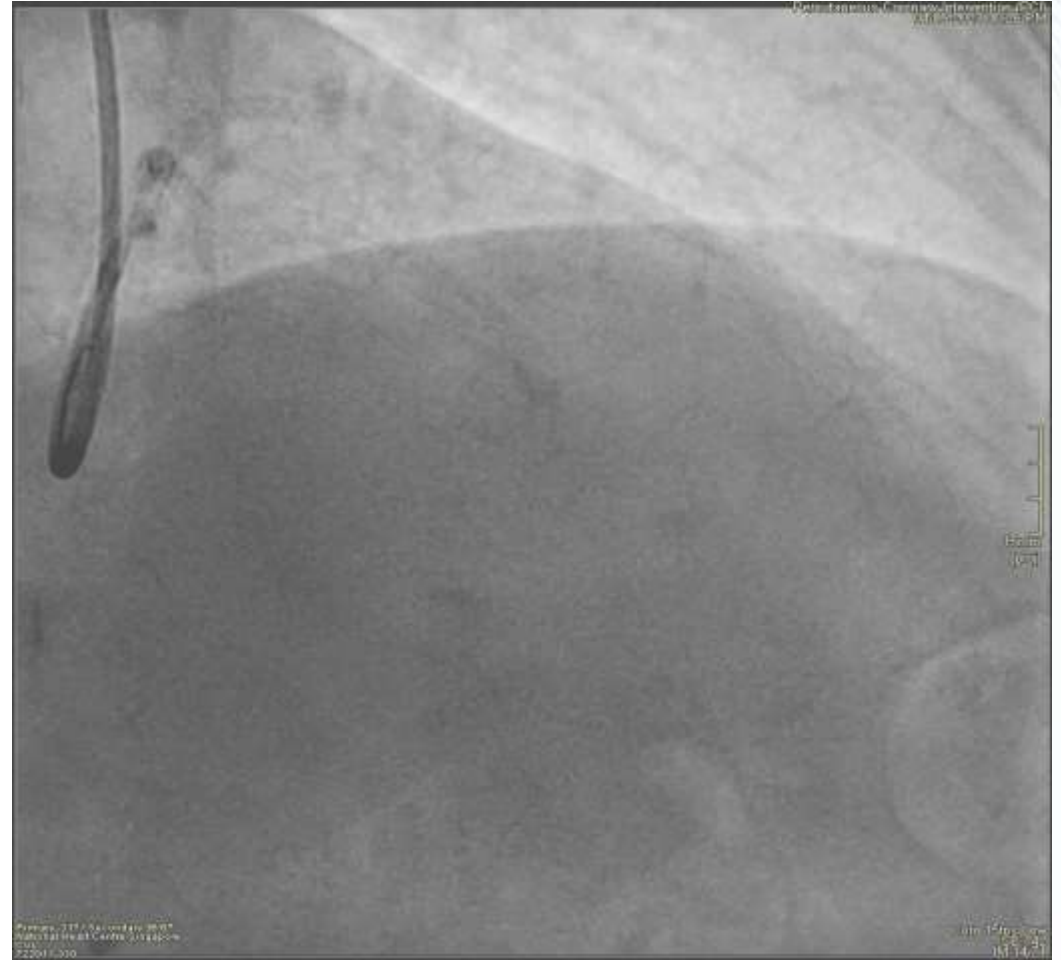
- **80 y.o** female
- DM, hypertension, hyperlipidemia
- CKD stage 3 (eGFR 44)
- **Inferior-RV MI**
(Feb 2023)
 - **TVD**
 - PCI/DES (x2) to RCA
- Declined subsequent referral for CABG
- Recurrent NSTEMI
(Apr-May 2023)



PCI to LAD



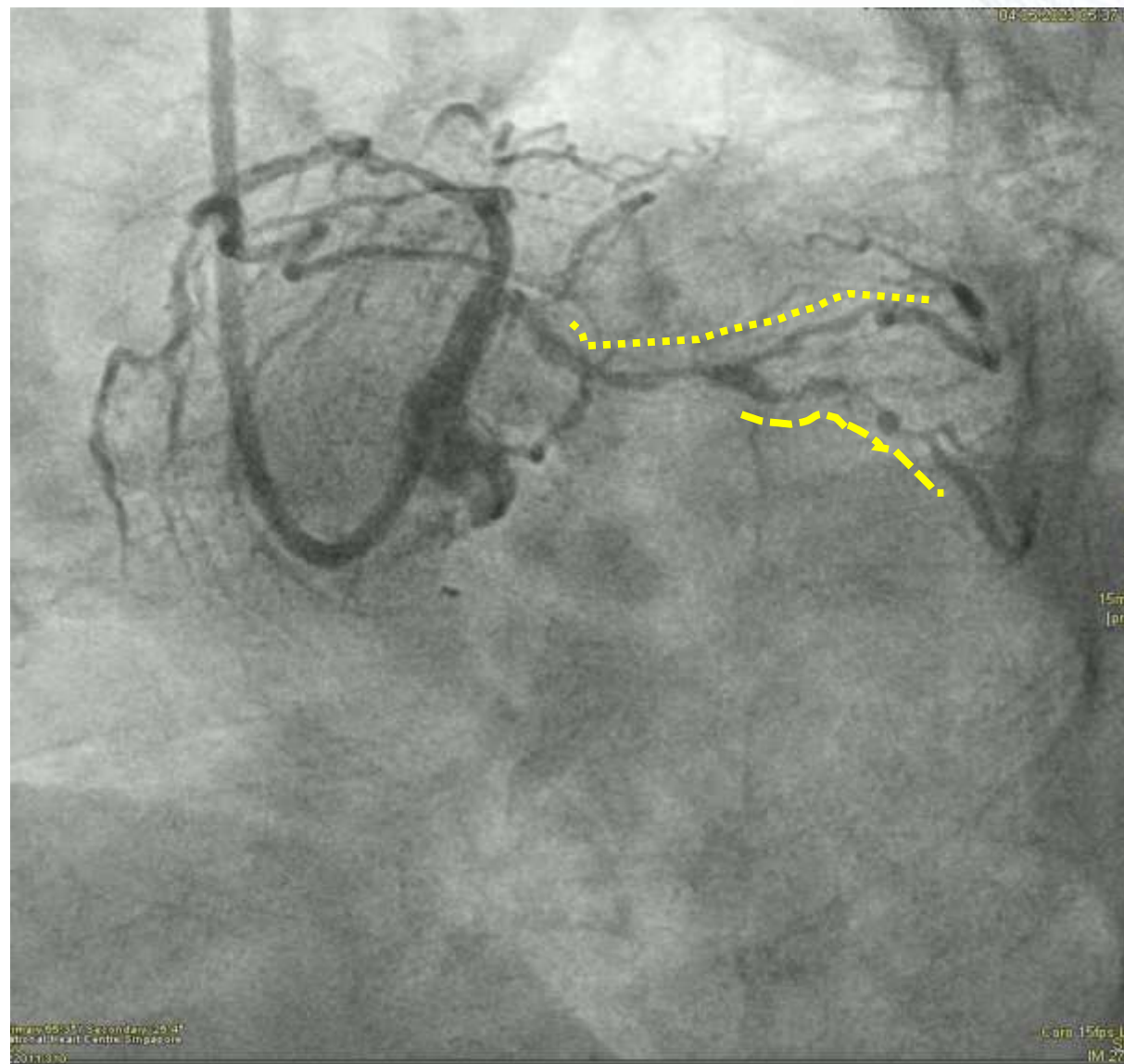
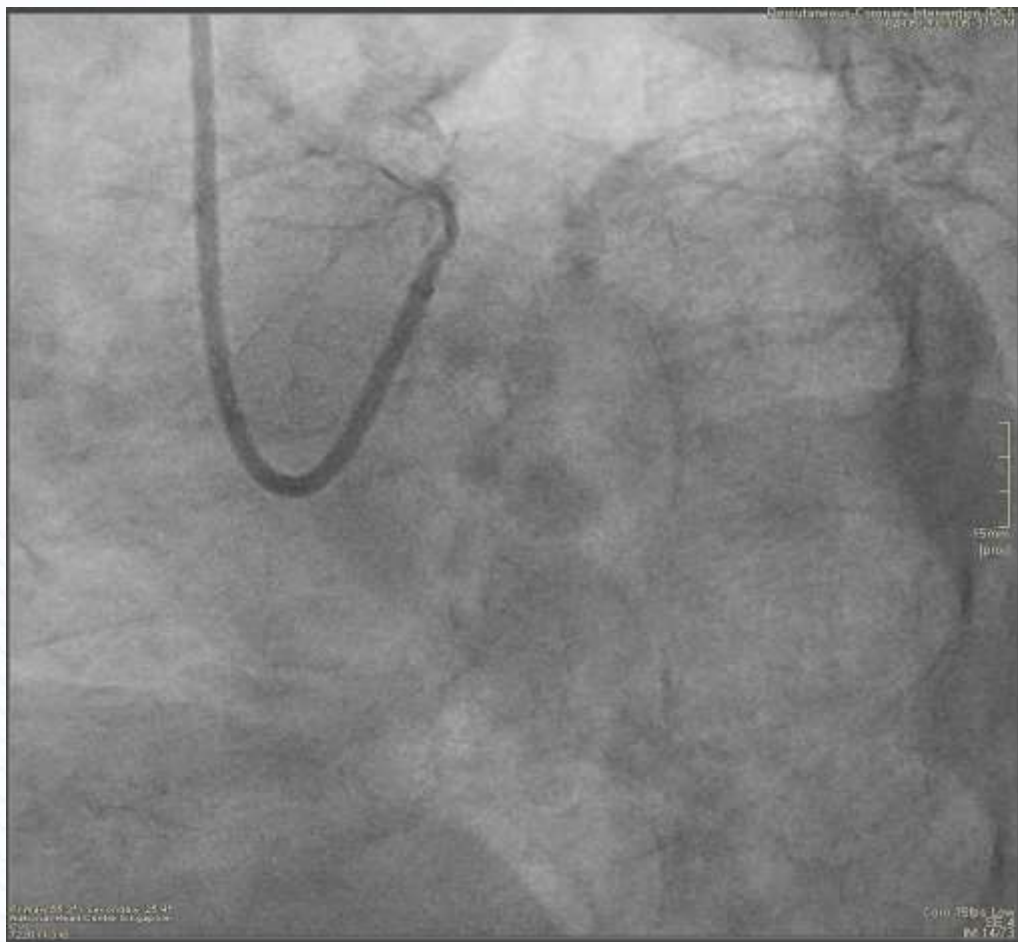
6F EBU 3. IVUS
NC (Accuforce®) + Cutting balloon (Wolverine®)
DES (Ultimaster Tensei 2.5/38 mm)

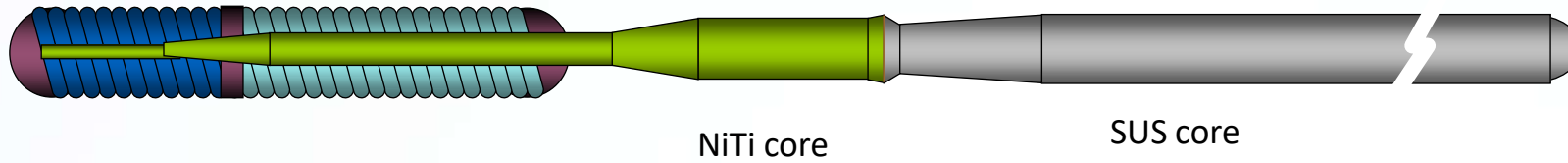


LCX

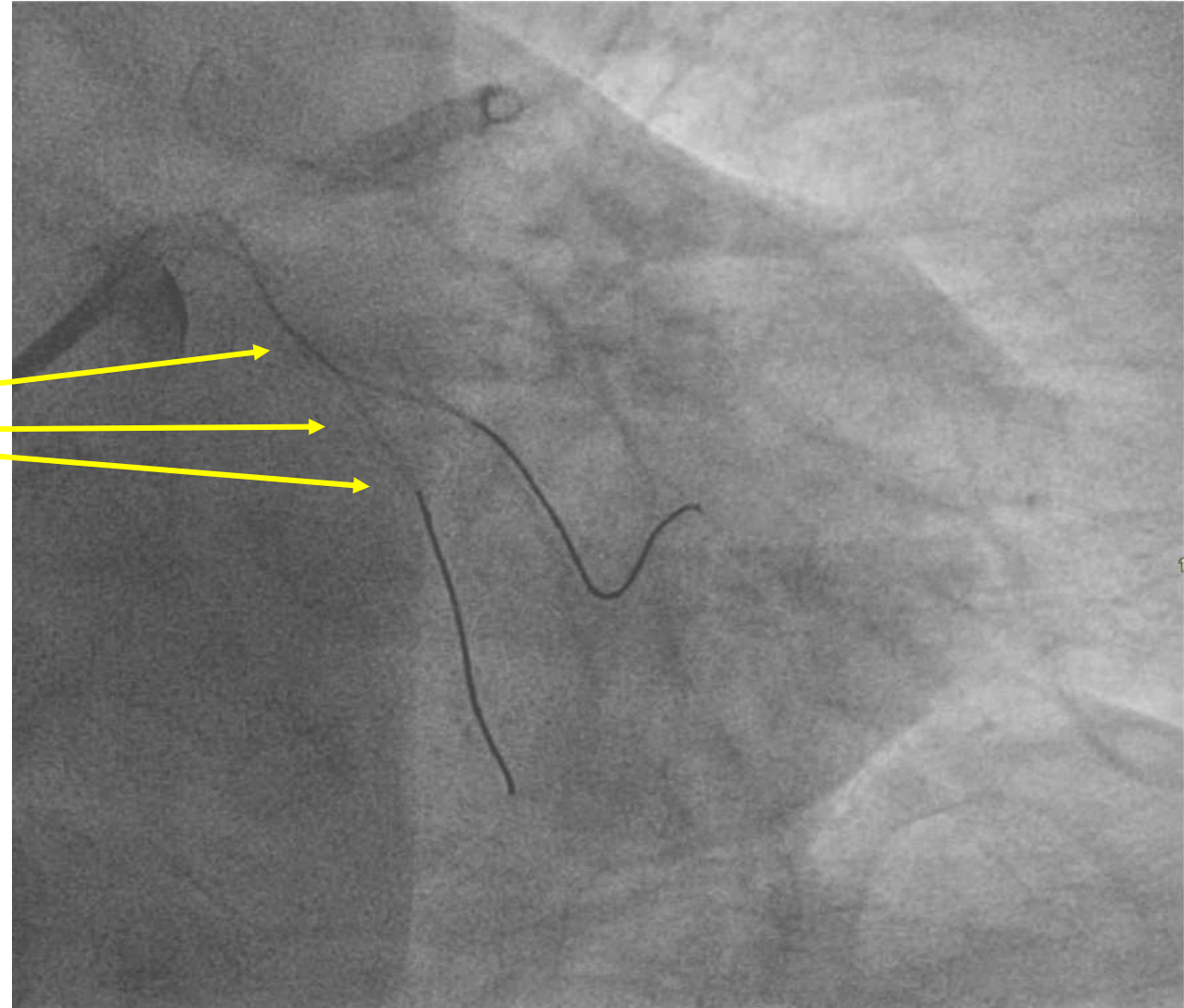


LCX





- 6F EBU 3.0
- Sion Blue to OM1
- **Runthrough Floppy** to distal LCX
 - *very difficult wiring*
 - *'gritty feel'*



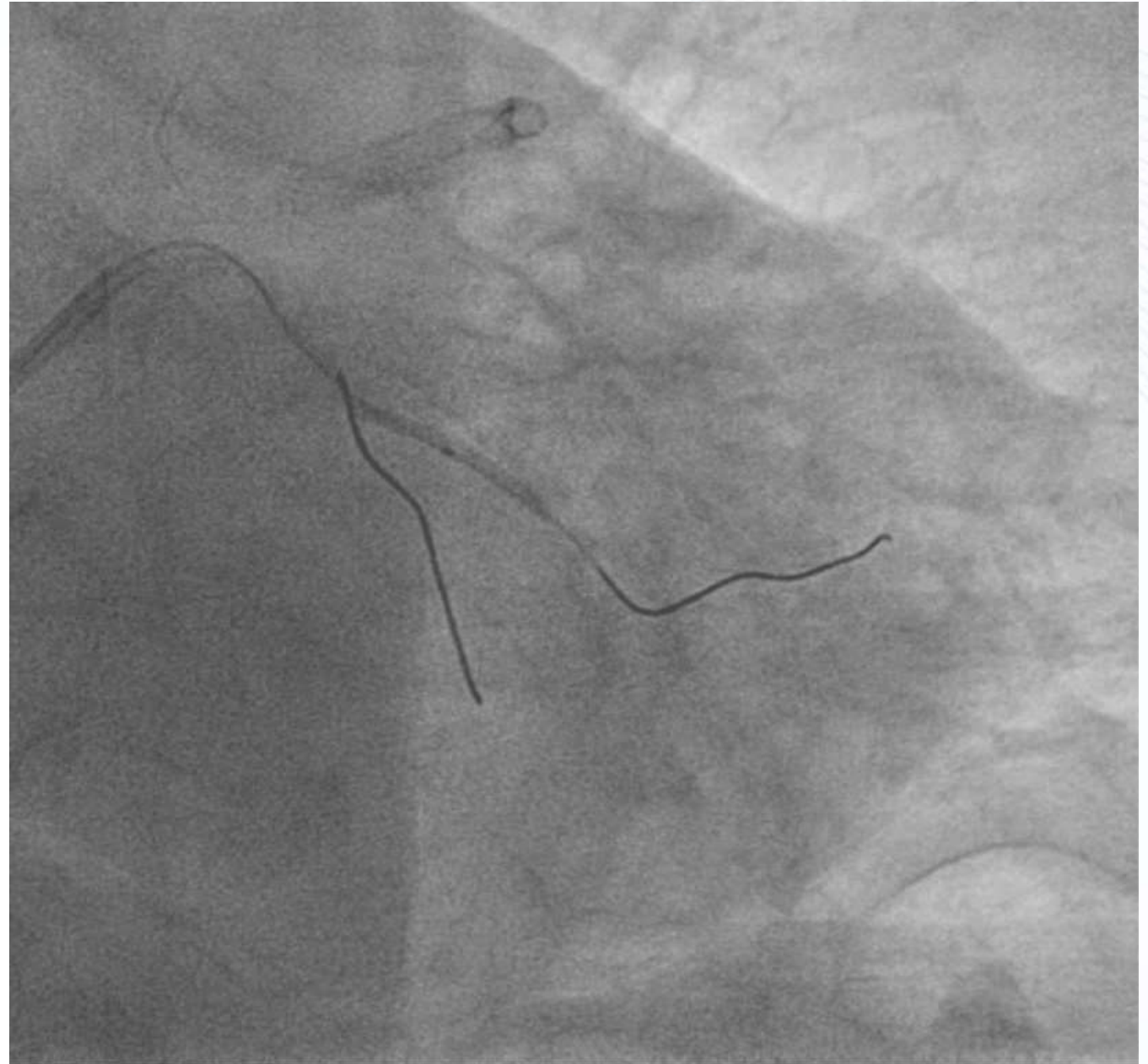
- **6F EBU 3.0**
- **Sion Blue to OM1**
- **Runthrough Floppy** to distal LCX
 - *very difficult wiring*
 - *'gritty feel'*
- **Ryurei 1.5 mm balloon**



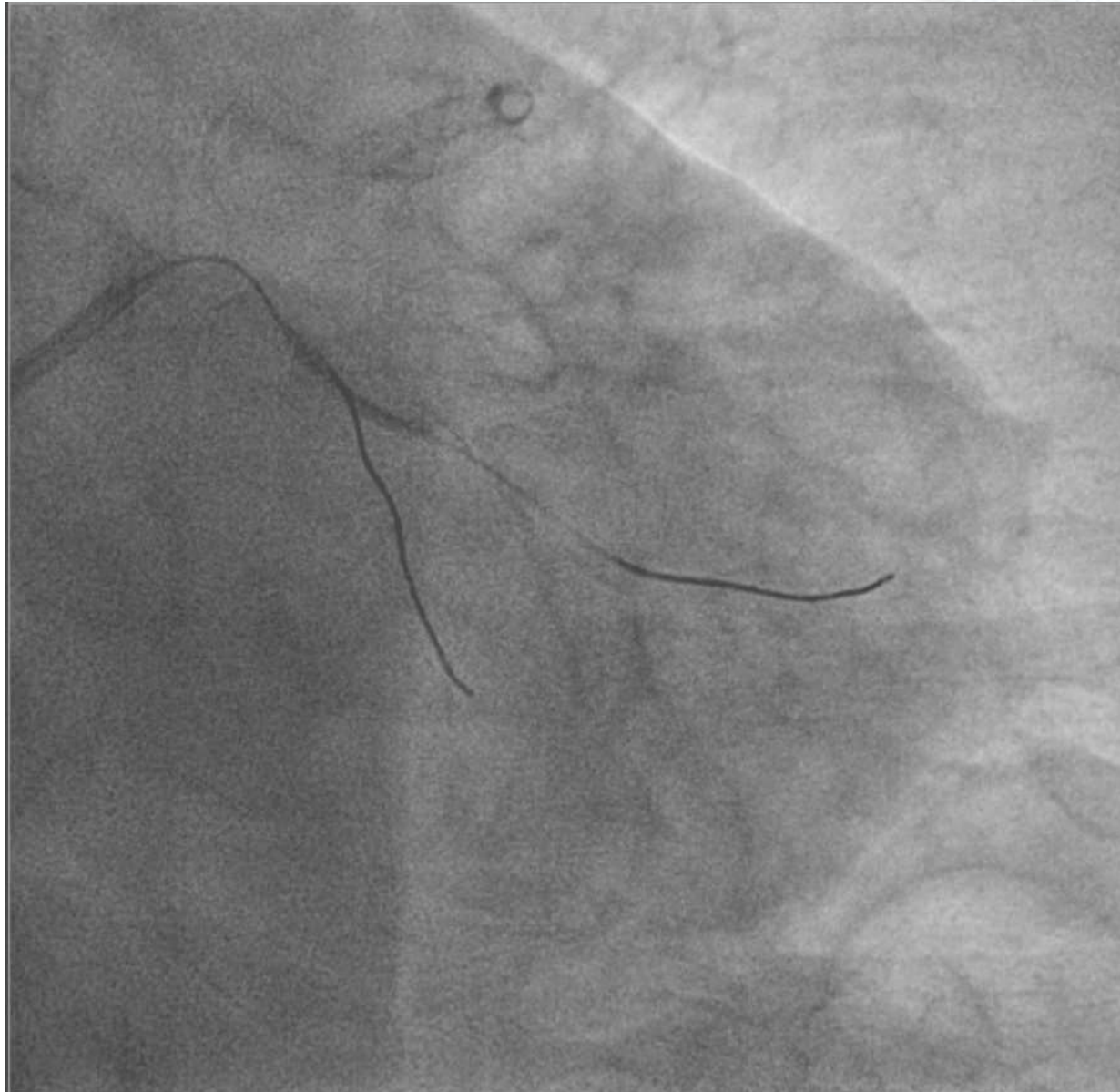
- **6F EBU 3.0**
- **Sion Blue to OM1**
- **Runthrough Floppy** to distal LCX
 - *very difficult wiring*
 - *'gritty feel'*
- **Ryurei 1.5 mm balloon**



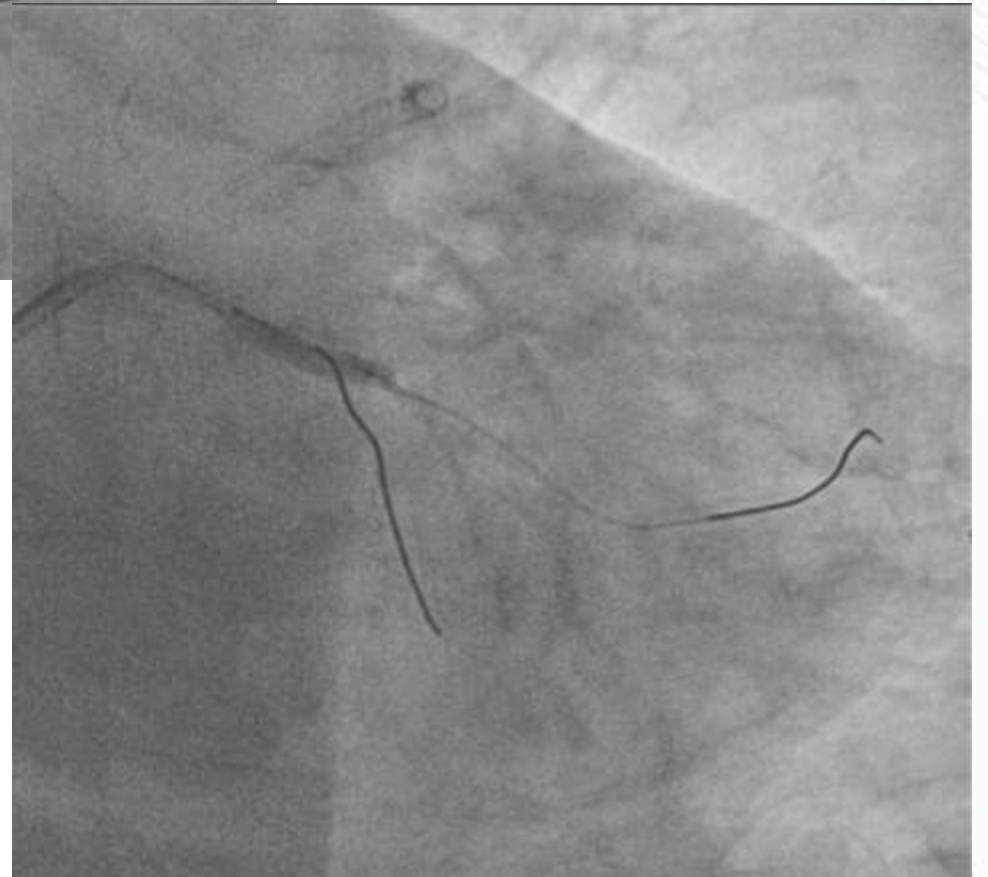
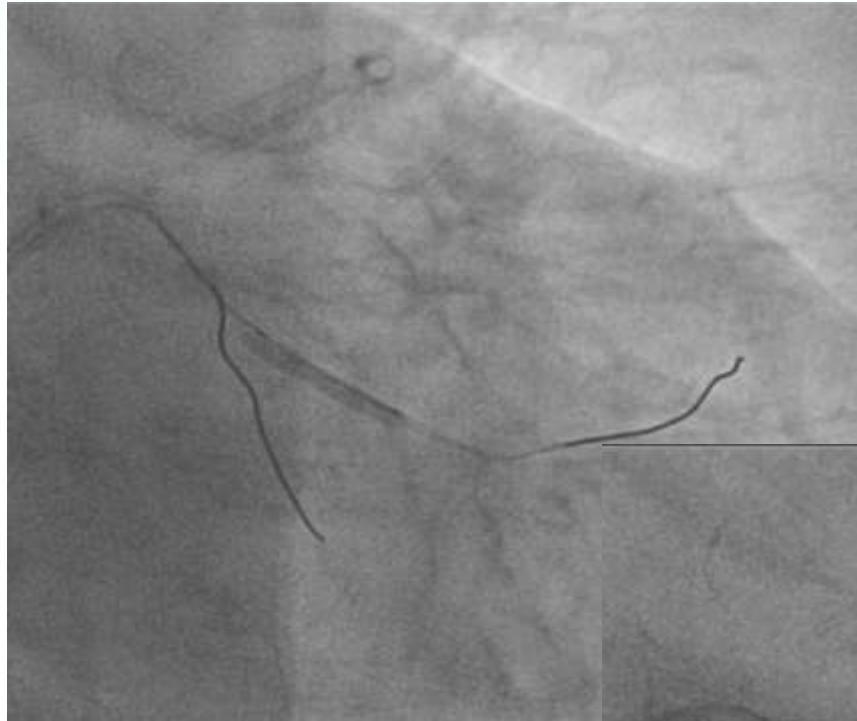
- **6F EBU 3.0**
- **Sion Blue to OM1**
- **Runthrough Floppy** to distal LCX
 - *very difficult wiring*
 - *'gritty feel'*
- **Ryurei 1.5 mm balloon**



- **6F EBU 3.0**
- **Sion Blue to OM1**
- **Runthrough Floppy** to distal LCX
 - *very difficult wiring*
 - *'gritty feel'*
- **Ryurei 1.5 mm balloon**



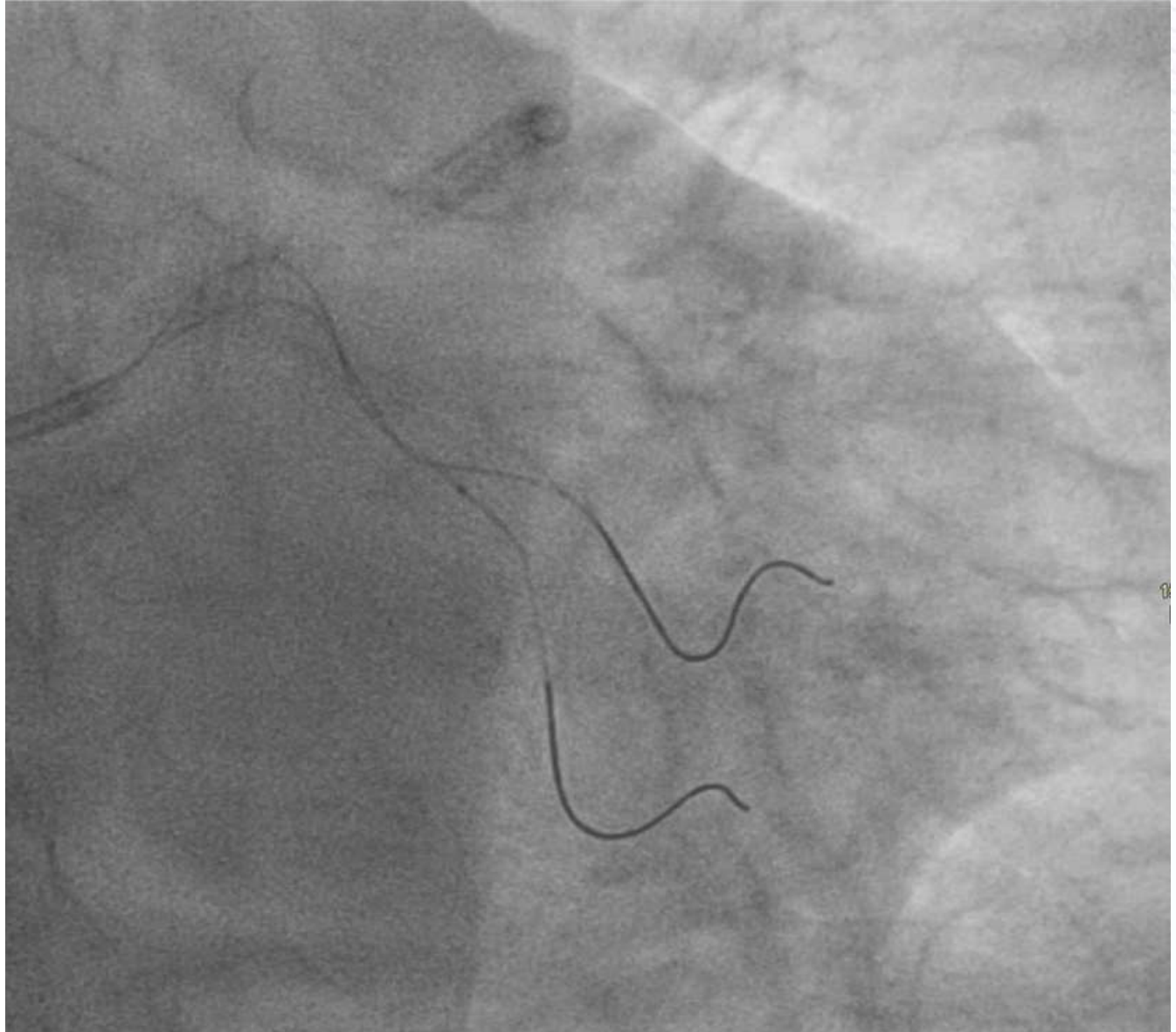
- **6F EBU 3.0**
- **Sion Blue to OM1**
- **Runthrough Floppy** to distal LCX
 - *very difficult wiring*
 - *'gritty feel'*
- **Ryurei 1.5 mm balloon**
- **NC Scoreflex scoring balloon 2.0 mm**



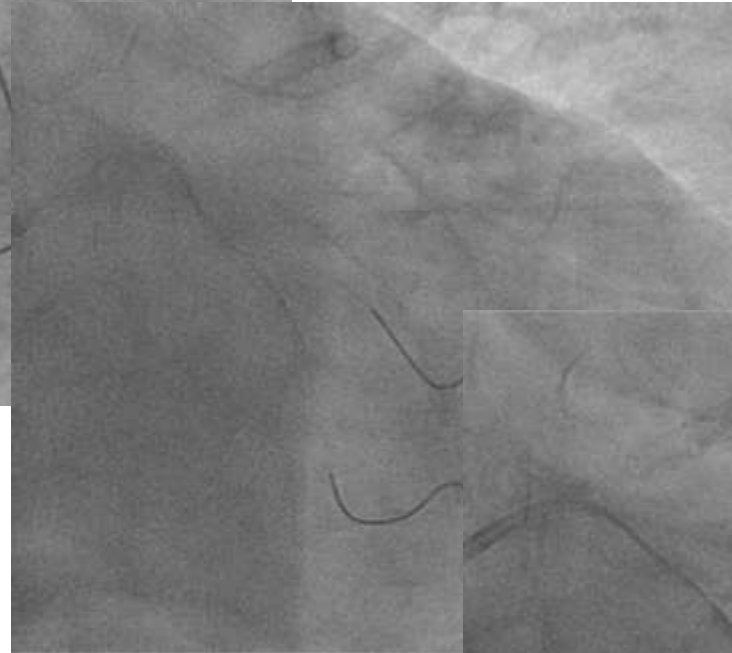
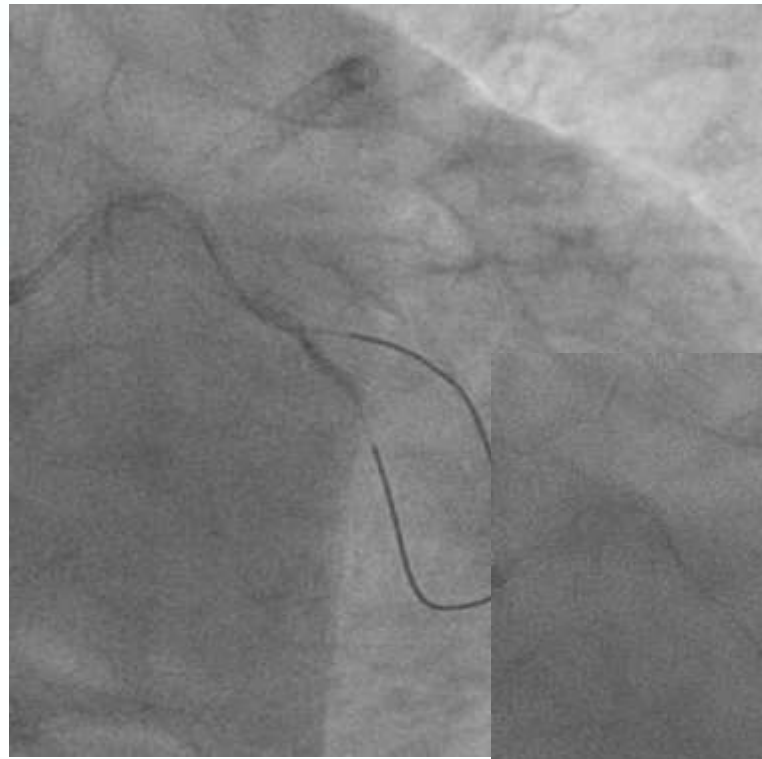
- 6F EBU 3.0
- Sion Blue to OM1
- **Runthrough Floppy** to distal LCX
 - *very difficult wiring*
 - *'gritty feel'*
- **Ryurei** 1.5 mm balloon
- NC Scoreflex scoring balloon 2.0 mm



- 6F EBU 3.0
- Sion Blue to OM1
- **Runthrough Floppy** to distal LCX
 - *very difficult wiring*
 - *'gritty feel'*
- **Ryurei** 1.5 mm balloon
- NC Scoreflex scoring balloon 2.0 mm
- 're-wrapped' **Ryurei** 1.5 mm balloon



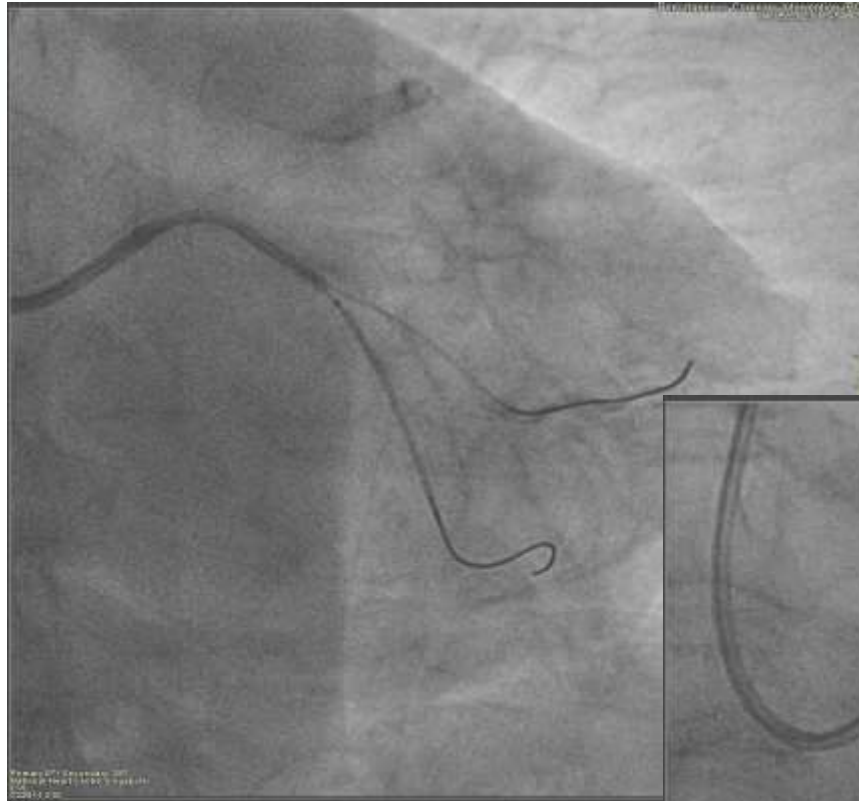
- 6F EBU 3.0
- Sion Blue to OM1
- **Runthrough Floppy** to distal LCX
 - *very difficult wiring*
 - *'gritty feel'*
- **Ryurei** 1.5 mm balloon
- NC Scoreflex scoring balloon 2.0 mm
- **'re-wrapped'** **Ryurei** 1.5 mm balloon
 - *'leopard crawl' technique*



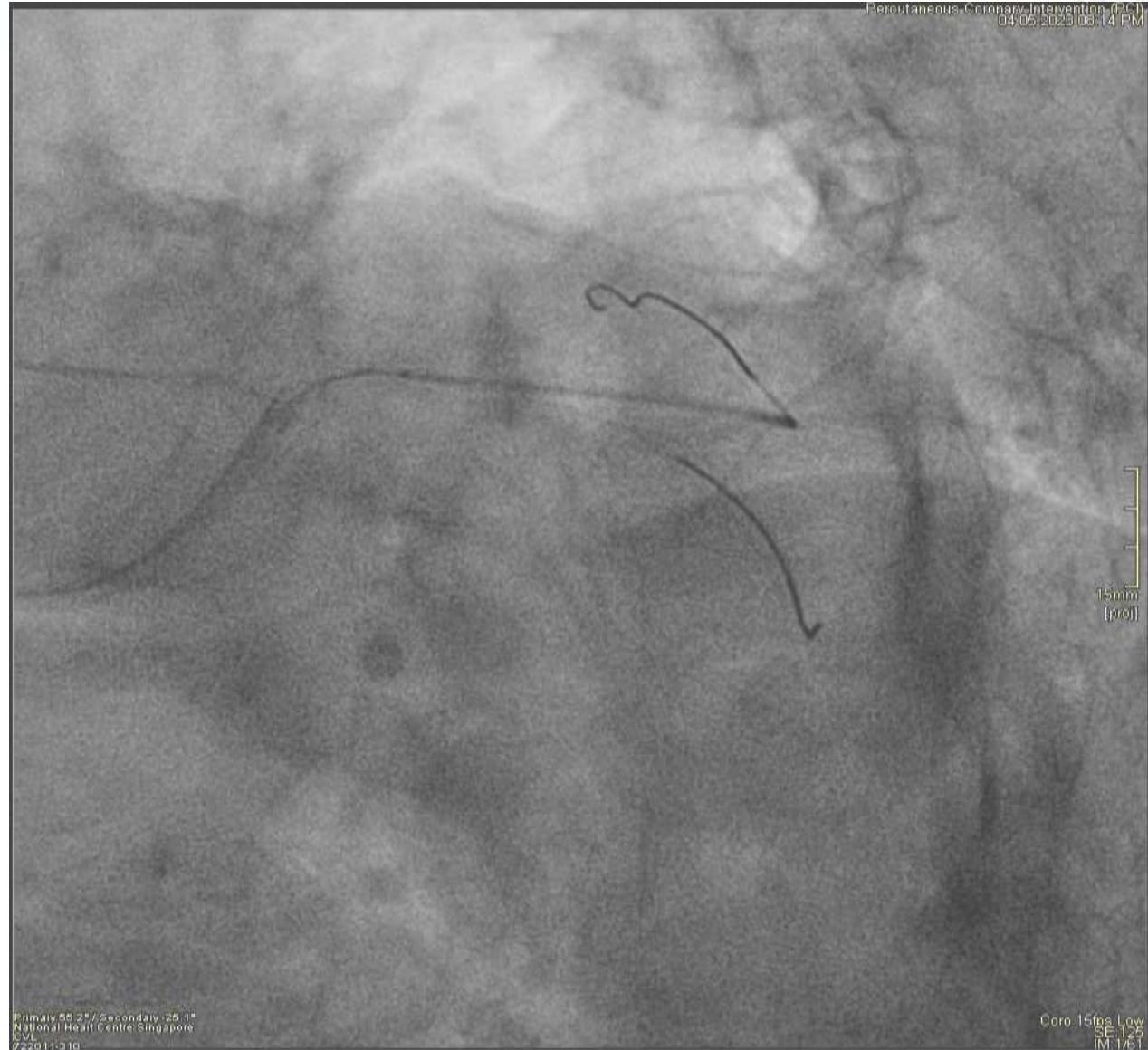
- 6F EBU 3.0
- Sion Blue to OM1
- **Runthrough Floppy** to distal LCX
 - *very difficult wiring*
 - *'gritty feel'*
- **Ryurei** 1.5 mm balloon
- NC Scoreflex scoring balloon 2.0 mm
- 're-wrapped' **Ryurei** 1.5 mm balloon
 - *'leopard crawl' technique*



- 6F EBU 3.0
- Sion Blue to OM1
- **Runthrough Floppy** to distal LCX
 - *very difficult wiring*
 - *'gritty feel'*
- **Ryurei** 1.5 mm balloon
- NC Scoreflex scoring balloon 2.0 mm
- 're-wrapped' **Ryurei** 1.5 mm balloon
 - *'leopard crawl' technique*
- Guide-extension catheter assisted stenting
 - *DES 2.0/28 mm*



- 6F EBU 3.0
- Sion Blue to OM1
- **Runthrough Floppy** to distal LCX
 - *very difficult wiring*
 - *'gritty feel'*
- **Ryurei** 1.5 mm balloon
- NC Scoreflex scoring balloon 2.0 mm
- 're-wrapped' **Ryurei** 1.5 mm balloon
 - *'leopard crawl' technique*
- Guide-extension catheter assisted stenting
 - *DES 2.0/28 mm*
 - *DES 2.0/39 mm*

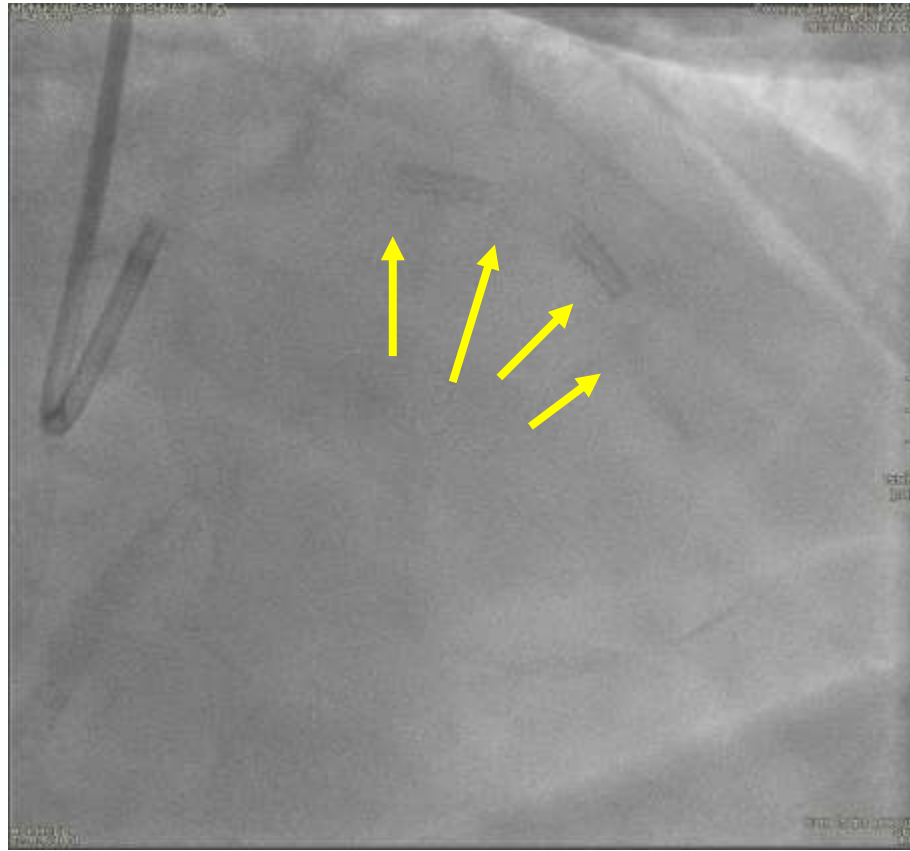


- 6F EBU 3.0
- Sion Blue to OM1
- **Runthrough Floppy** to distal LCX
 - *very difficult wiring*
 - *'gritty feel'*
- **Ryurei** 1.5 mm balloon
- NC Scoreflex scoring balloon 2.0 mm
- 're-wrapped' **Ryurei** 1.5 mm balloon
 - *'leopard crawl' technique*
- **Guide-extension catheter assisted stenting**
 - *DES 2.0/28 mm*
 - *DES 2.0/39 mm*



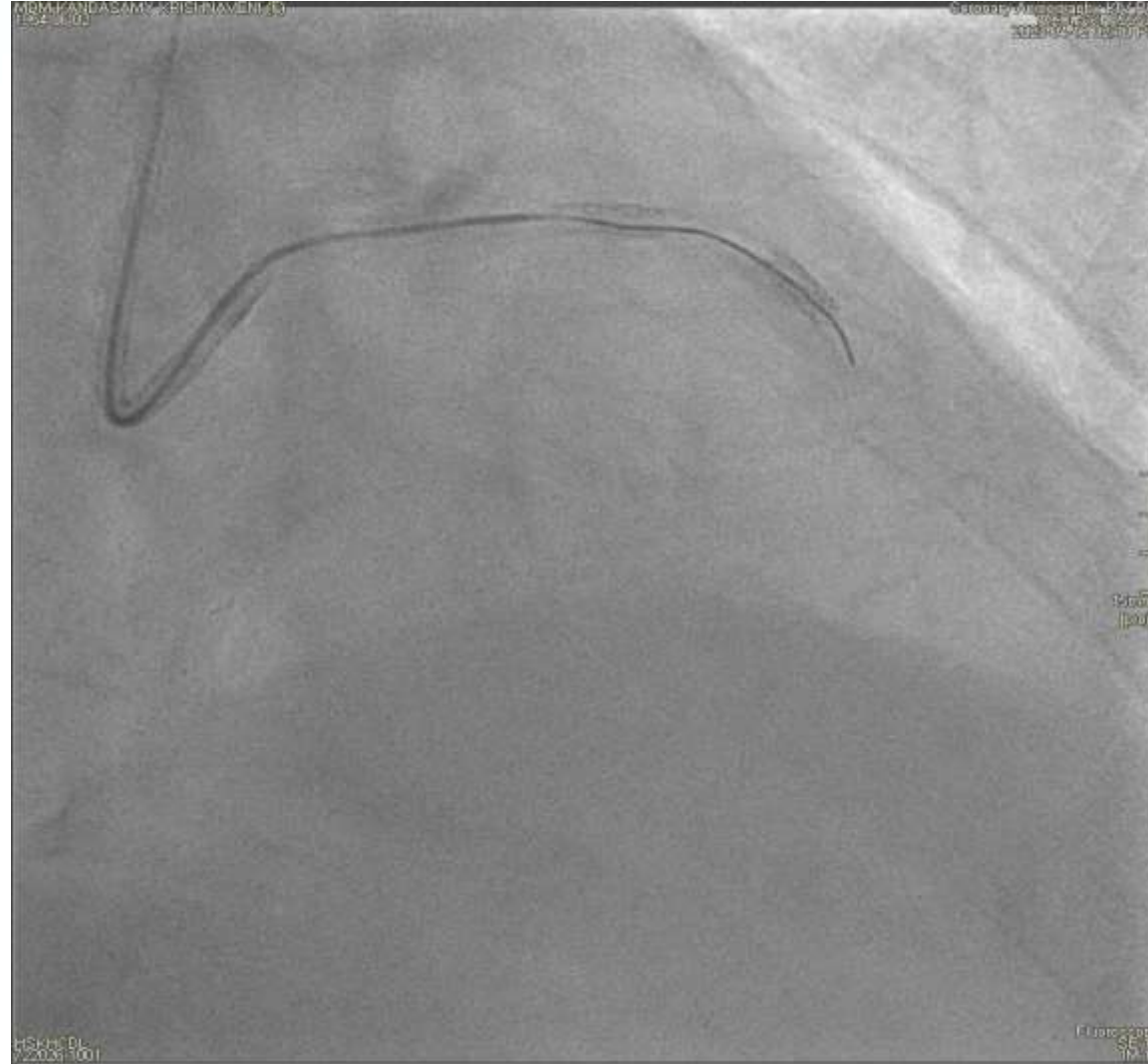
Case 2

- 68 y.o female with DM, HTN, HLD
- **2/2000** -- PCI x2 stents in LAD
- 3/2023 – PTCRA//DES(x2) to RCA.
- Target: **Long diffuse subtotal/total occlusion of LAD ISR**

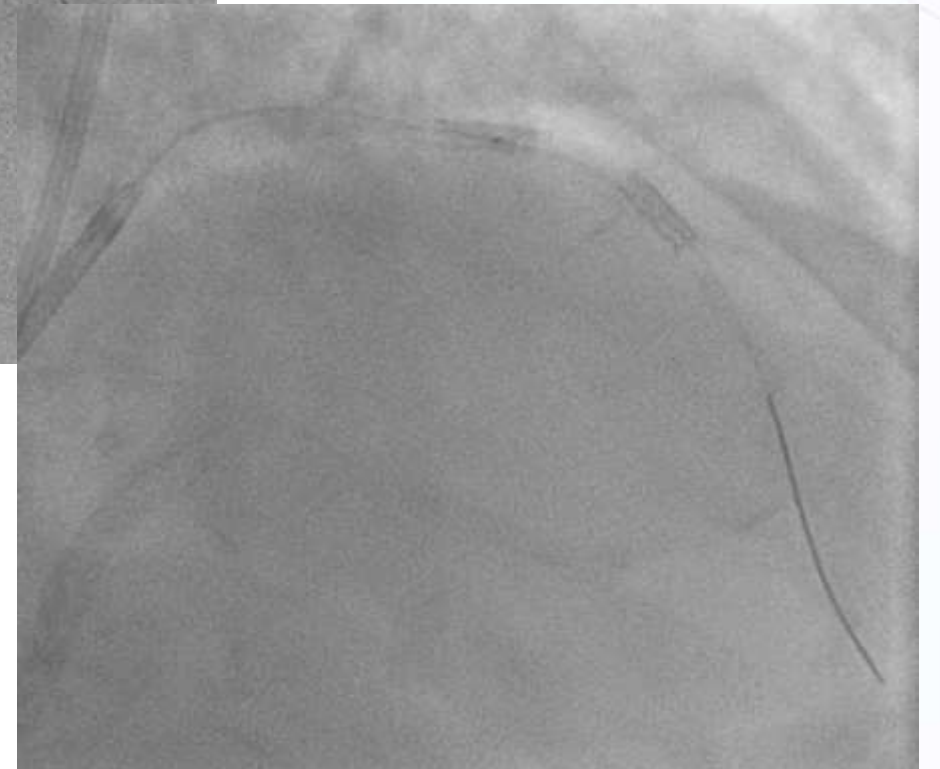
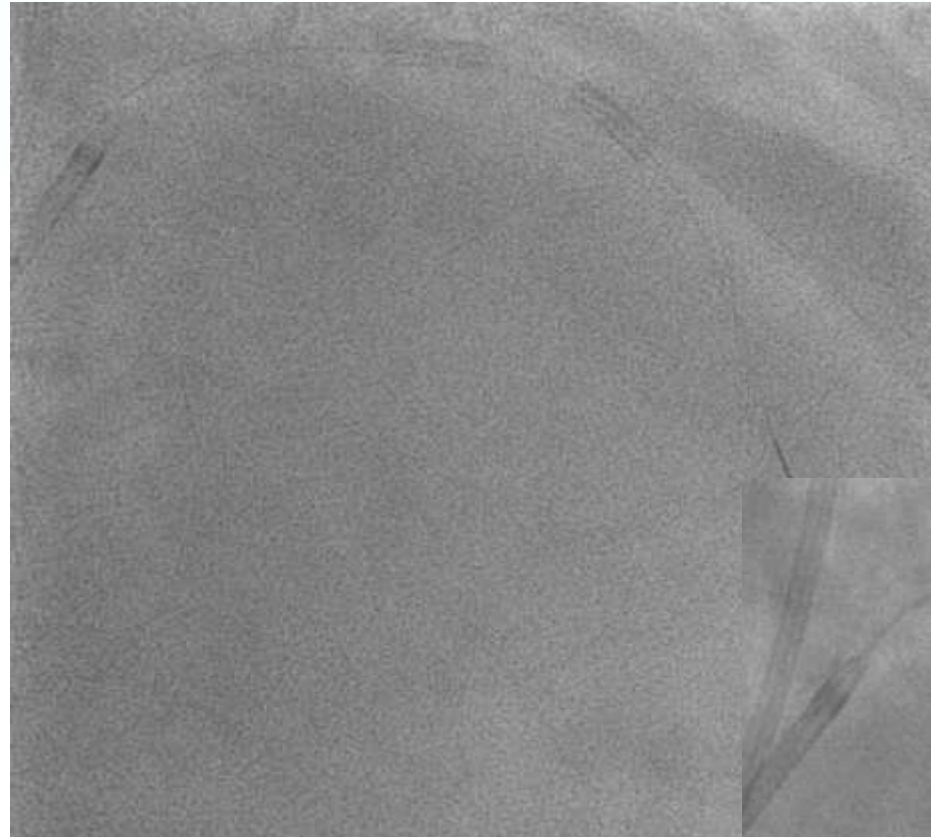


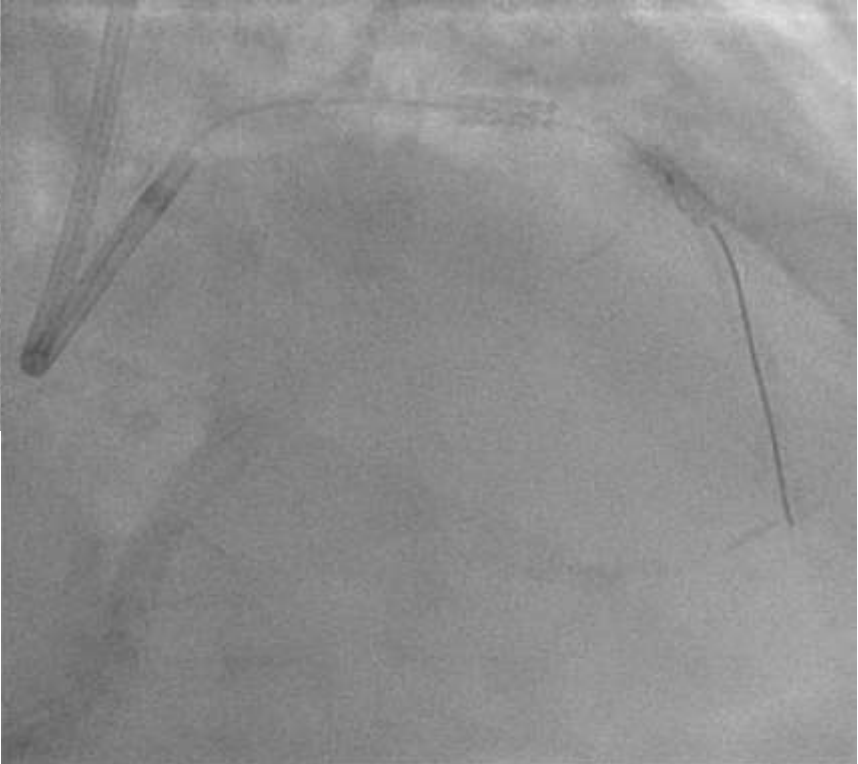
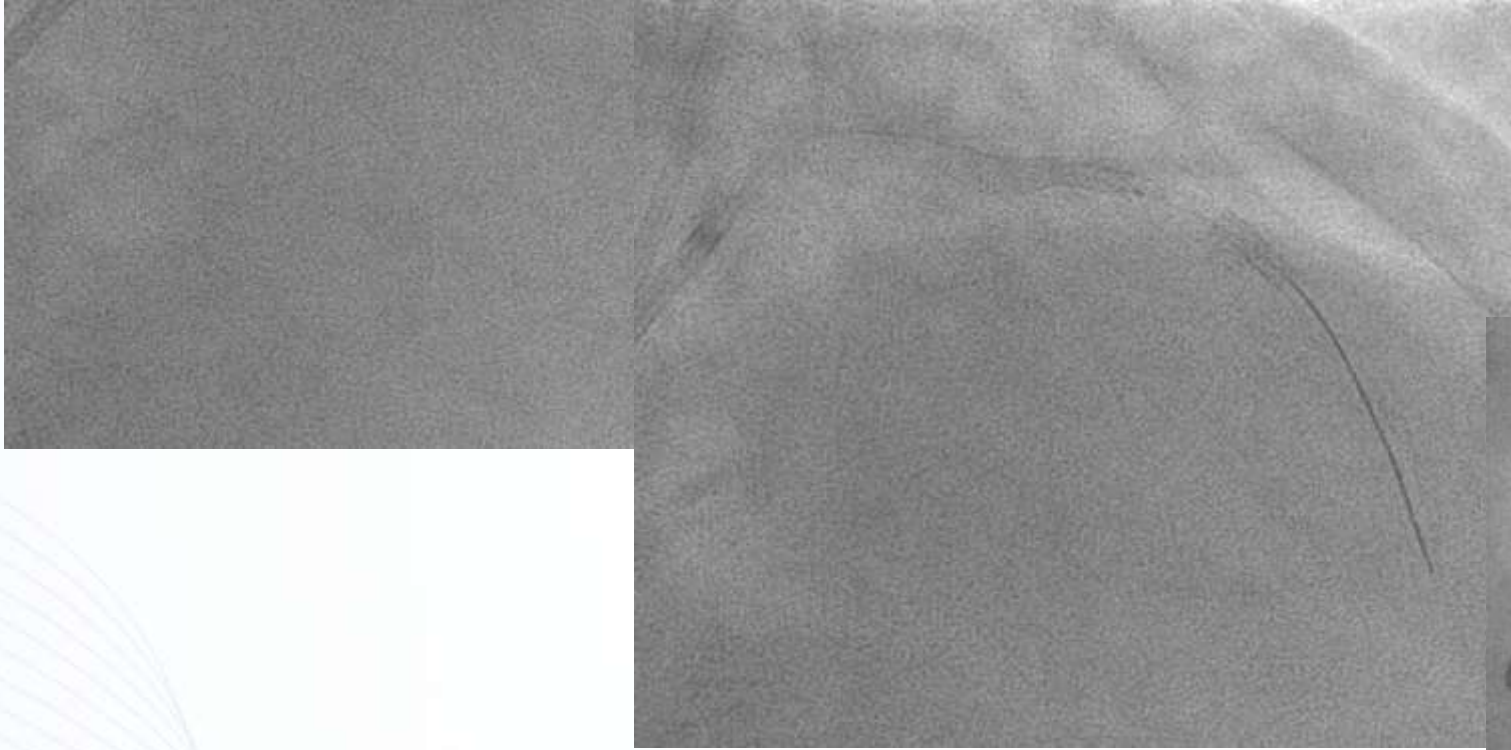
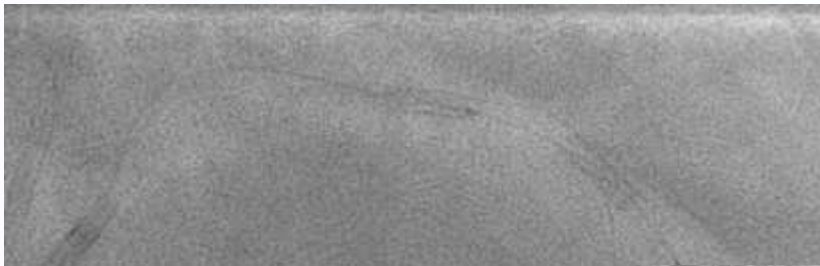
Case 2

- 68 y.o female with DM, HTN, HLD
- 2/2000 -- PCI x2 stents in LAD
- 3/2023 – PTCRA//DES(x2) to RCA.
- Target: **Long diffuse subtotal/total occlusion of LAD ISR**
 - **lesion crossed with Gladius Ex wire supported on microcatheter (MC)**
 - **MC unable to cross the proximal stented segment**



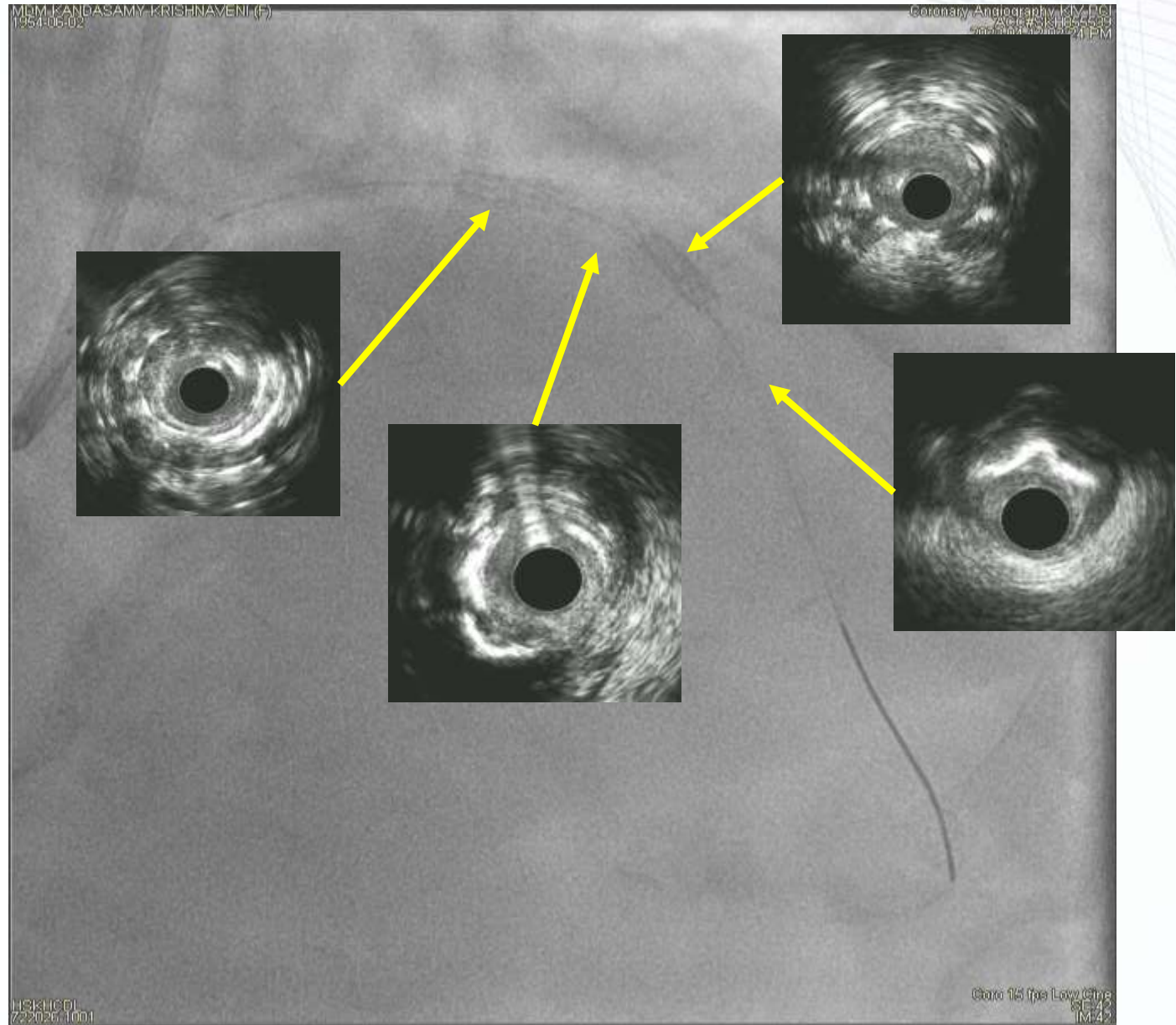
- Target: Long diffuse subtotal/total occlusion of LAD ISR
 - lesion crossed with Gladius Ex wire supported on microcatheter (MC)
 - MC unable to cross the proximal stented segment
 - **Ryurei 1.0 x 5 mm balloon**
 - **'leopard crawl' technique**





- Target: Long diffuse subtotal/total occlusion of LAD ISR

- lesion crossed with Gladius Ex wire supported on microcatheter (MC)
- MC unable to cross to proximal stented segment
- **Ryurei 1.0 x 5 mm balloon**
- **'leopard crawl' technique**
- **Ryurei 2.0 x 15 mm balloon**
- IVUS

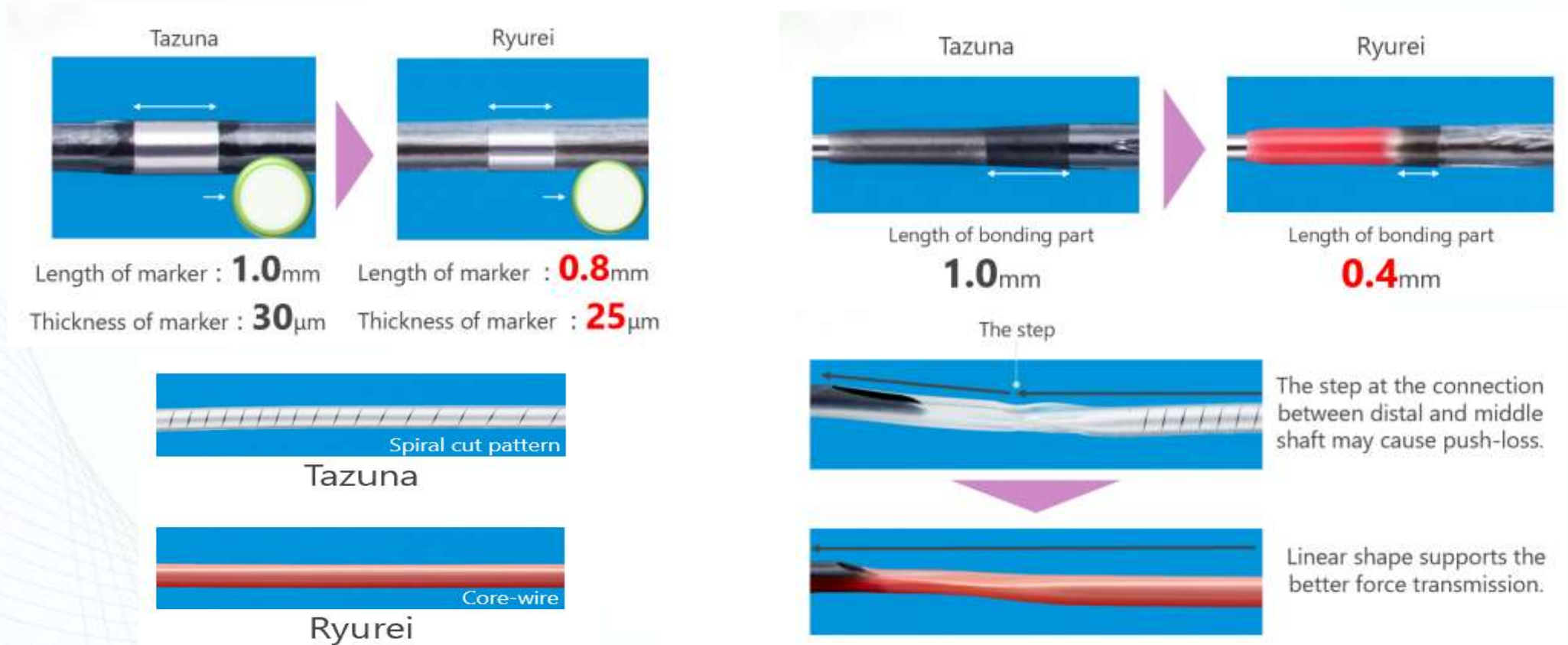


- Target: Long diffuse subtotal/total occlusion of LAD ISR
 - lesion crossed with Gladius Ex wire supported on microcatheter (MC)
 - MC unable to cross the proximal stented segment
 - **Ryurei 1.0 x 5 mm balloon**
 - **'leopard crawl' technique**
 - **Ryurei 2.0 x 15 mm balloon**
 - IVUS
 - 3.0 mm NC balloon
 - 3.0 mm drug-coated balloon



Conclusion

- **Ryurei** balloon, with improved deliverability having a more *(a) slender profile, (b) flexible distal part, (c) robust and pushable shaft*, is an important tool in dealing with challenging lesion



Conclusion

- **Ryurei** balloon, in combination with other useful tools / technique, contributed to the success of these complex cases
 - *supportive guide catheter and excellent guidewire*
 - *microcatheter*
 - *intra-coronary imaging*
 - *scoring balloon*
 - *guide-extension catheter*
 - *DES*
 - *drug-coated balloon*
 - *'leopard crawl' technique*

Thank You