

Several attempts of a Stent dislodgement during LCX PCI

Presenter : Min Woong Kim

Operator : Min Woong Kim

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Changwon, KOREA

Clinical information

- A 70-year-old female
- Chief complaint : Typical chest pain for several day
- Past medical history : DM

Lab. Finding

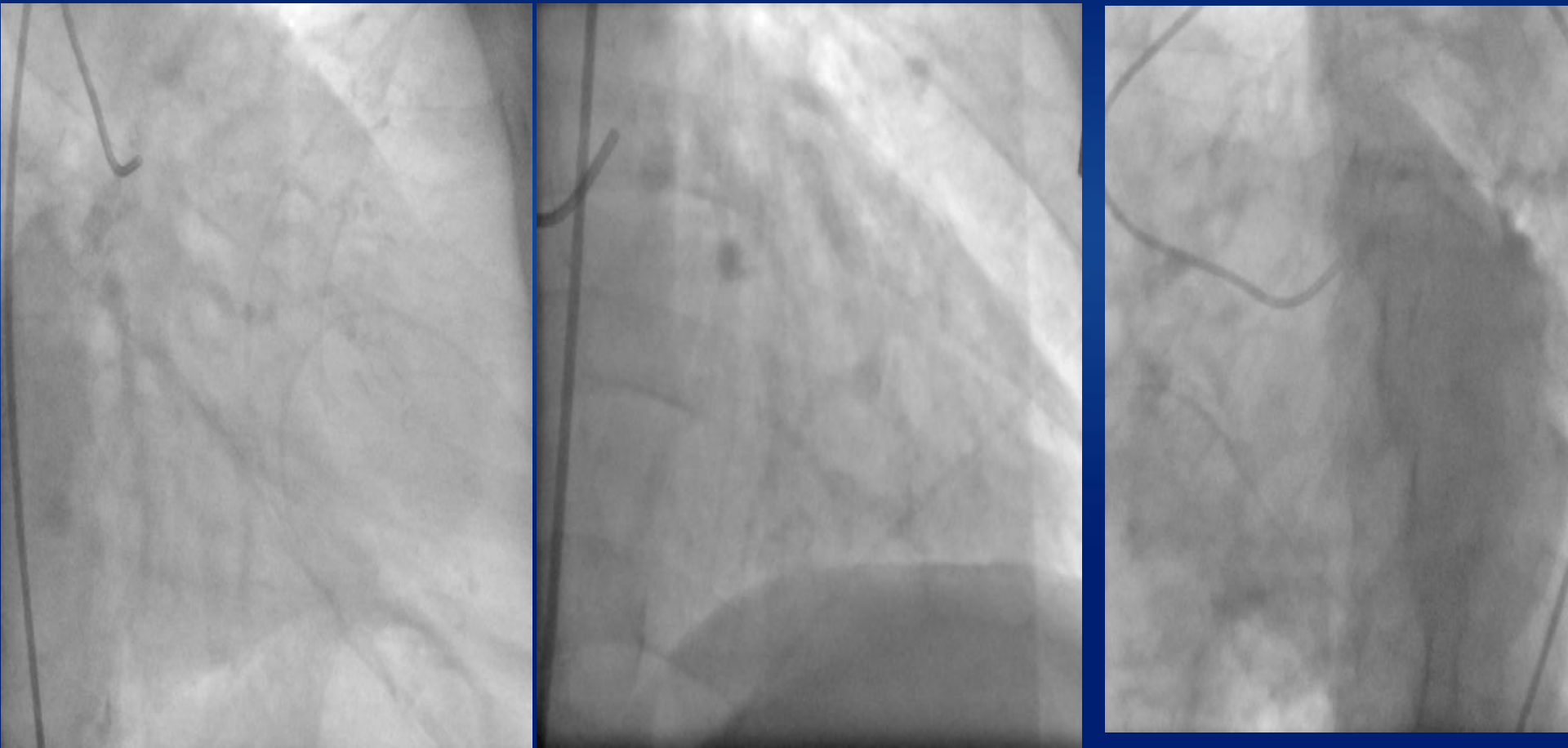
- EKG : ST elevation on II, III, avF lead
- Cardiac enzyme(CK-MB 222ng/mL,TnT 20.5ng/dL)
- TTE : Lower normal LV ejection fraction (52%), Hypokinesia of LV mid to basal inferior wall
- Clinical Dx: STEMI

Initial CAG



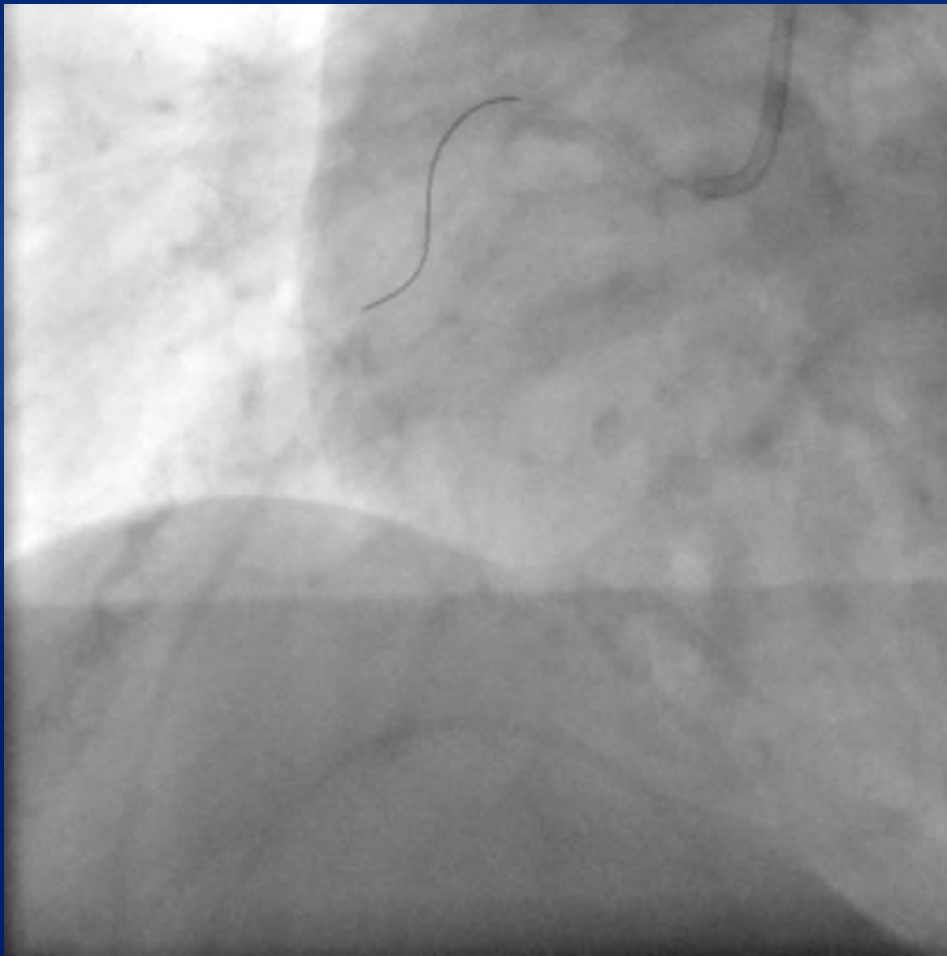
Mid RCA nearly total occlusion

Initial CAG



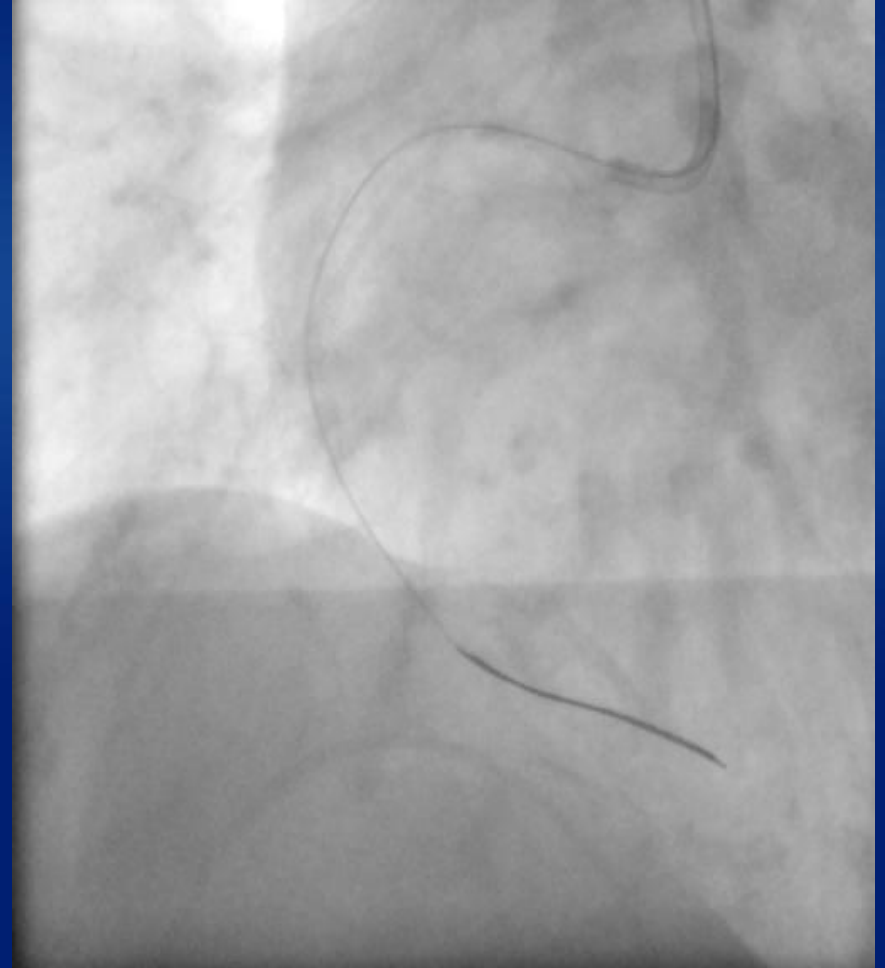
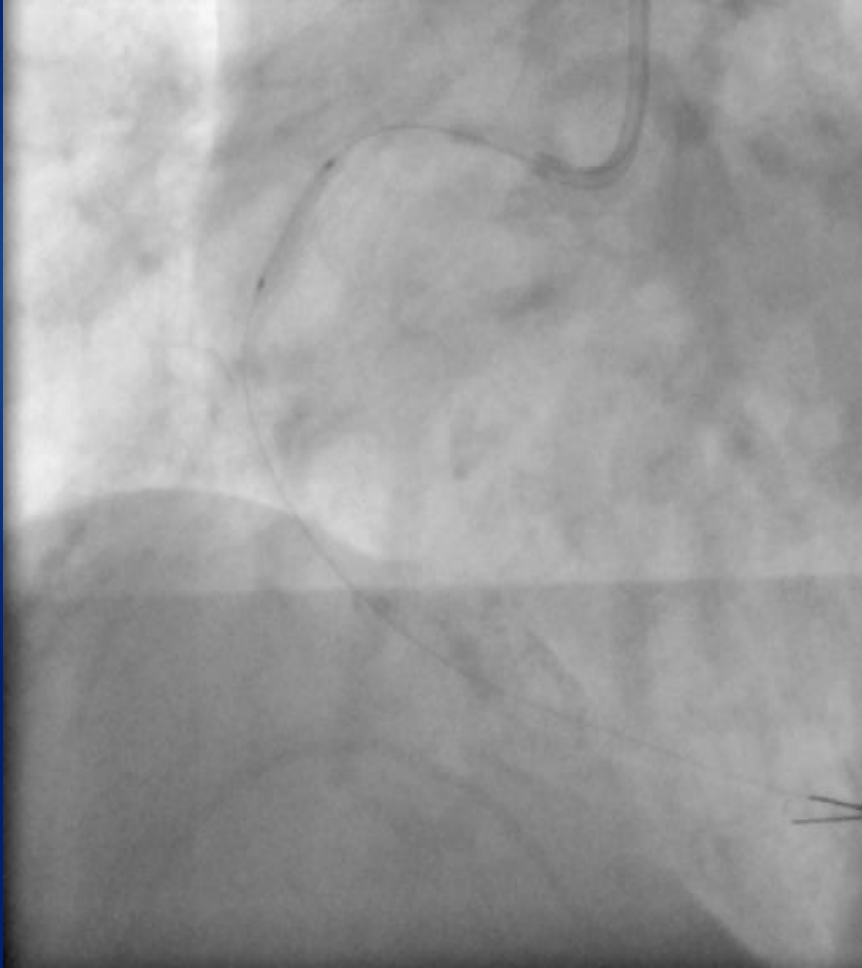
Significant stenosis LAD, LCX

PCI for RCA



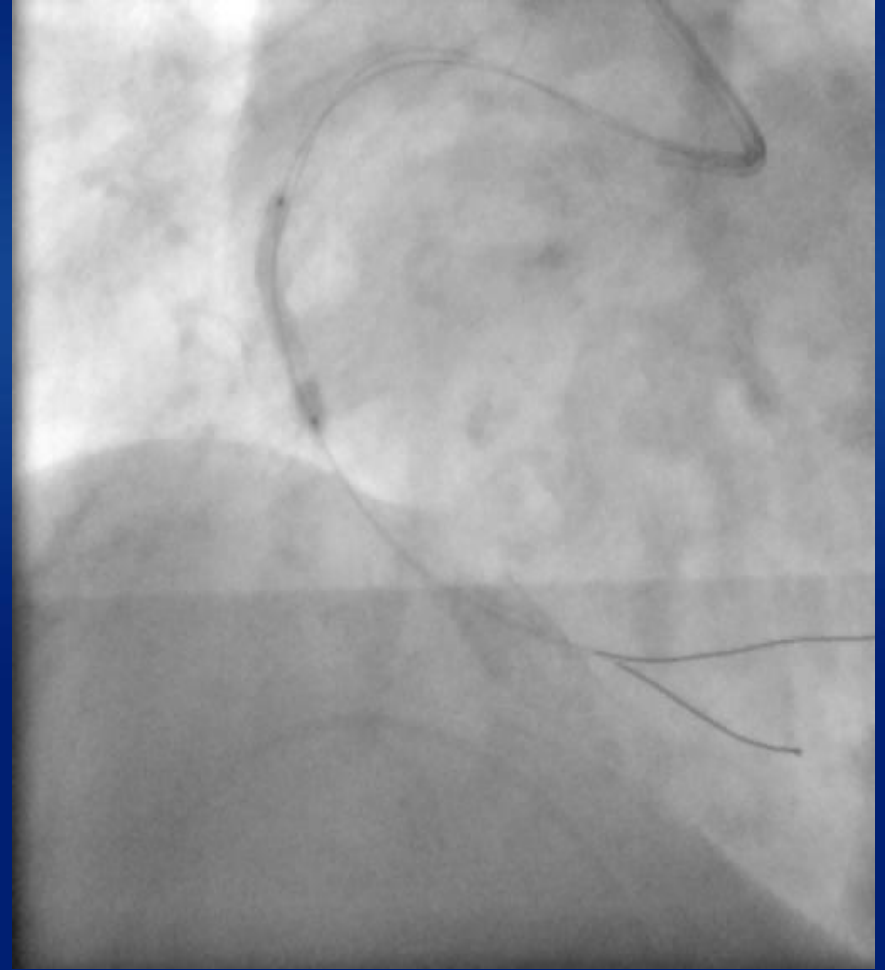
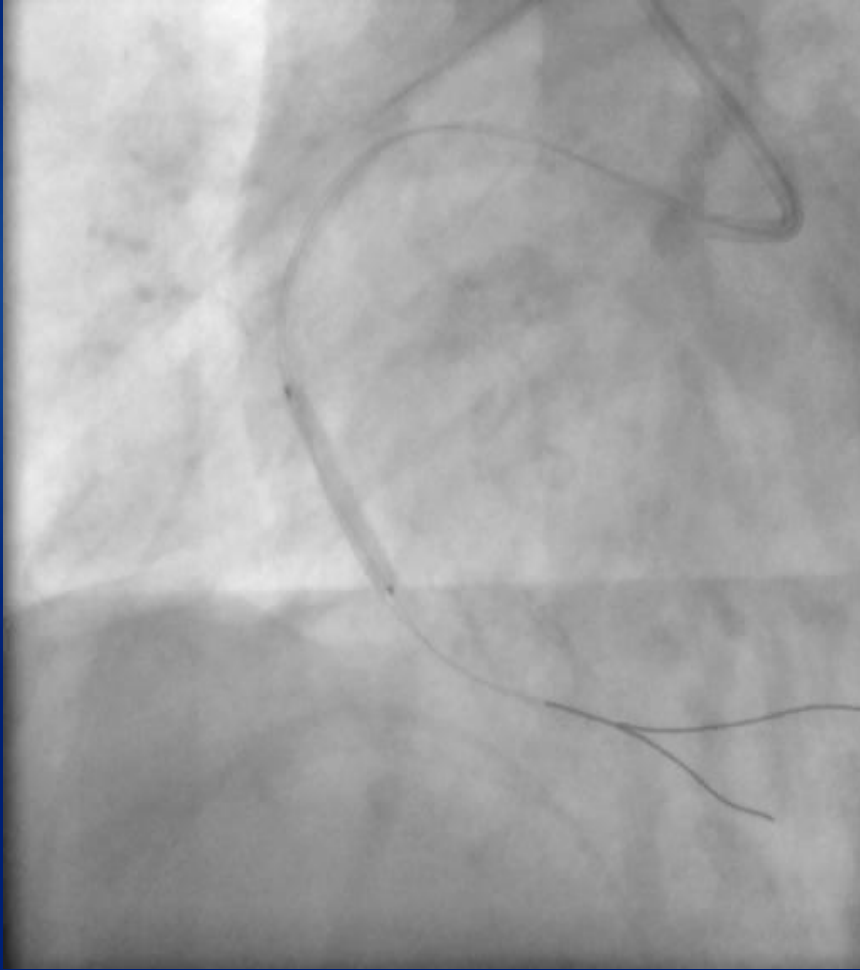
6Fr JR 4.0 catheter + a 0.014 Runthrough wire

Ballooning



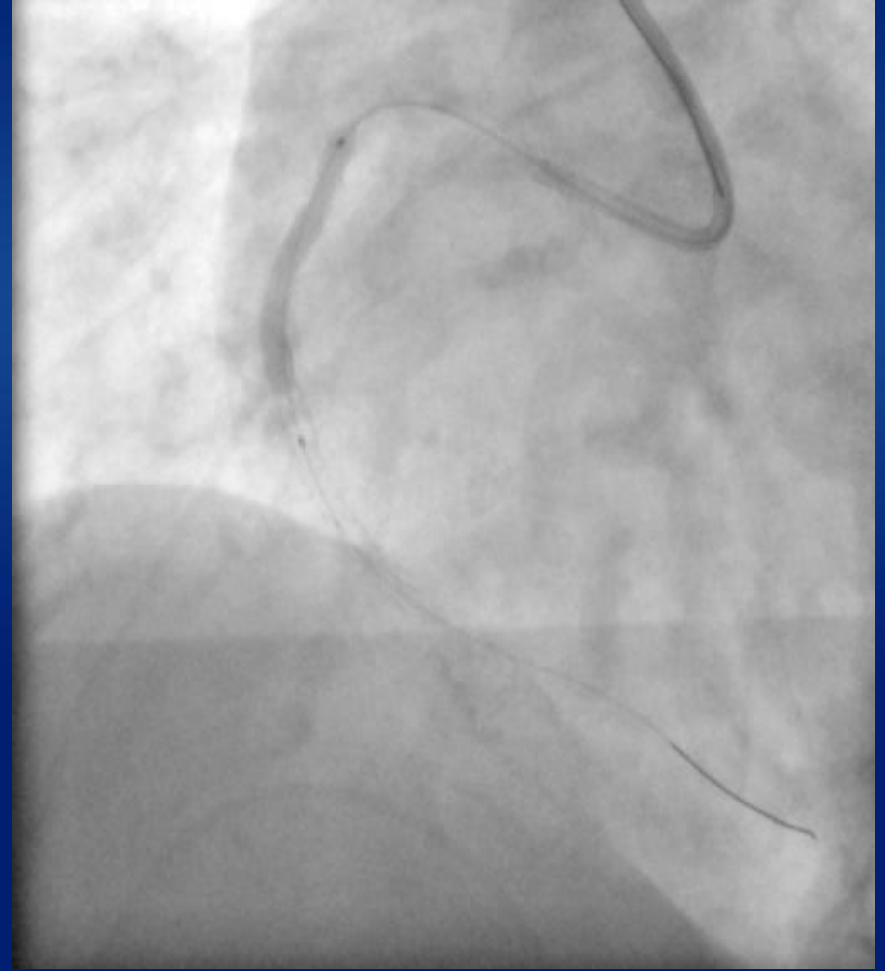
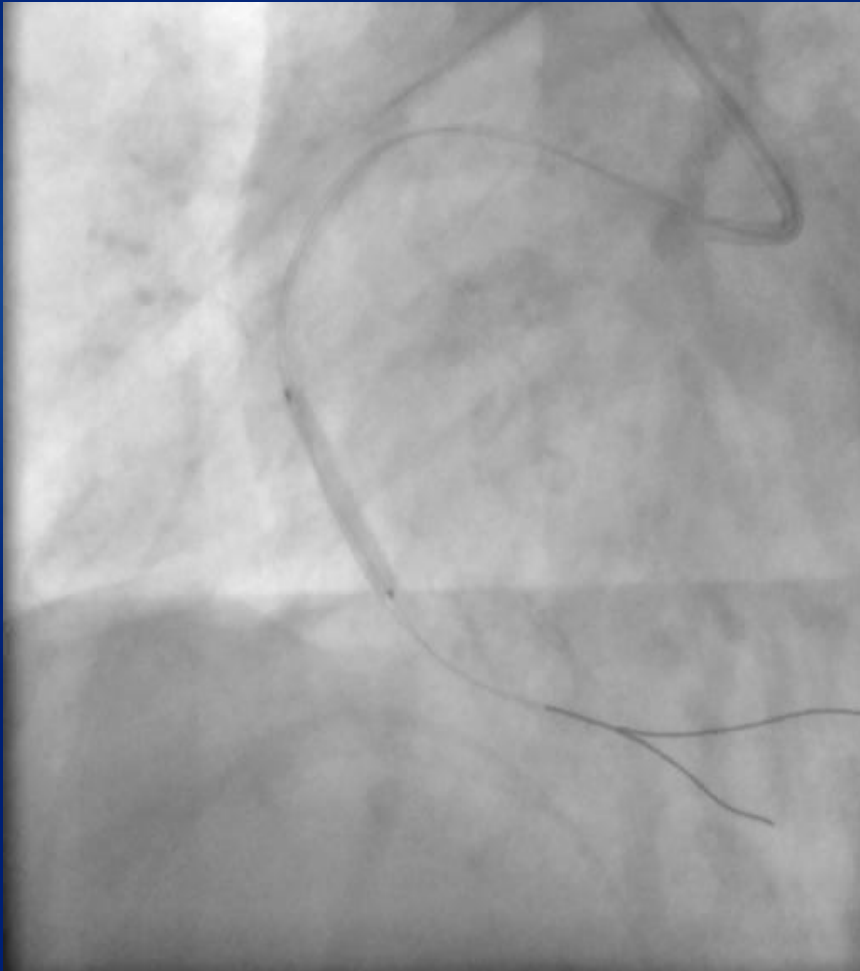
pre-dilated the RCA using a Ryujin 2.0x15mm

Re-ballooning



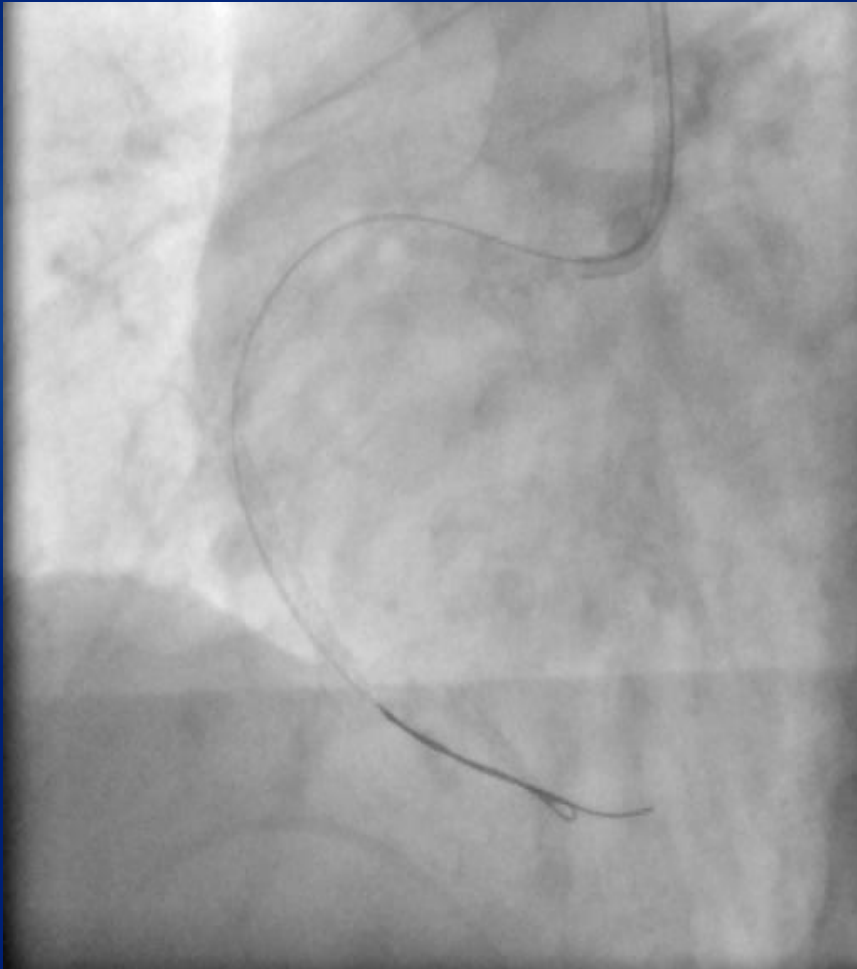
pre-dilated the RCA using Ryujiin 2.5x20mm

2 consecutive stents



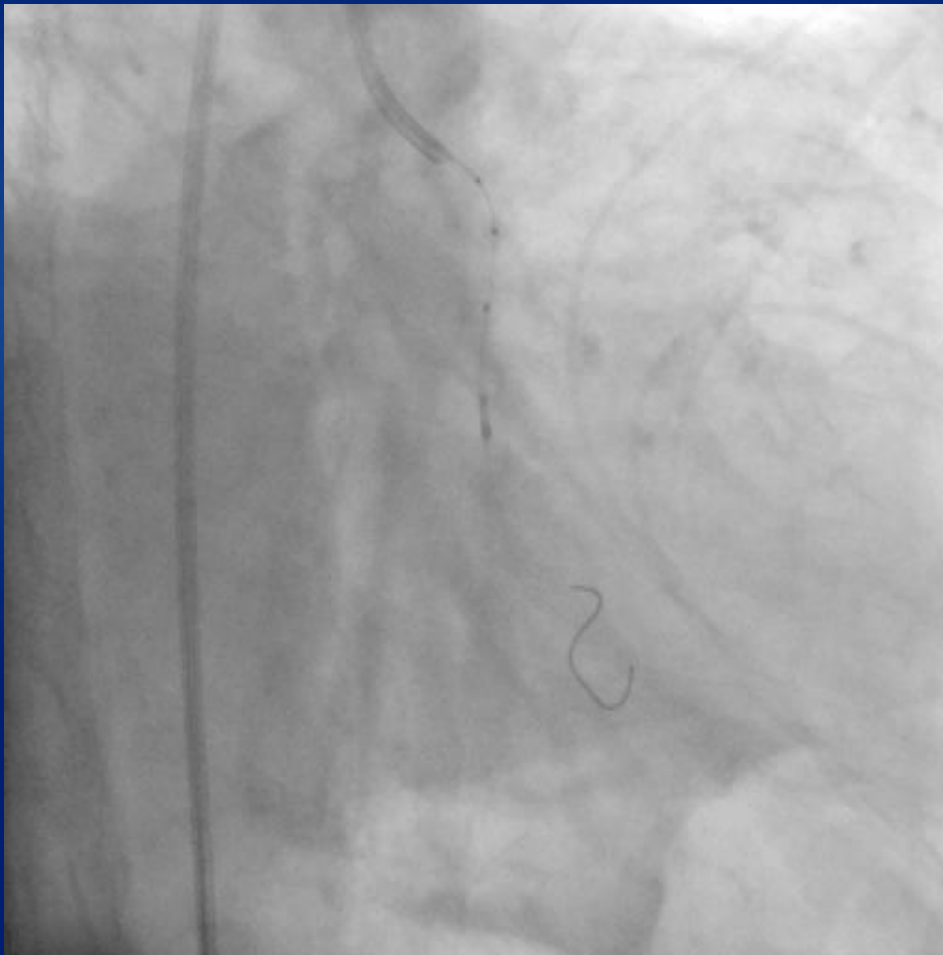
overlapping stenting in RCA (Biomatrix stent 2.75x28 mm and 3.0x28 mm)

Final CAG



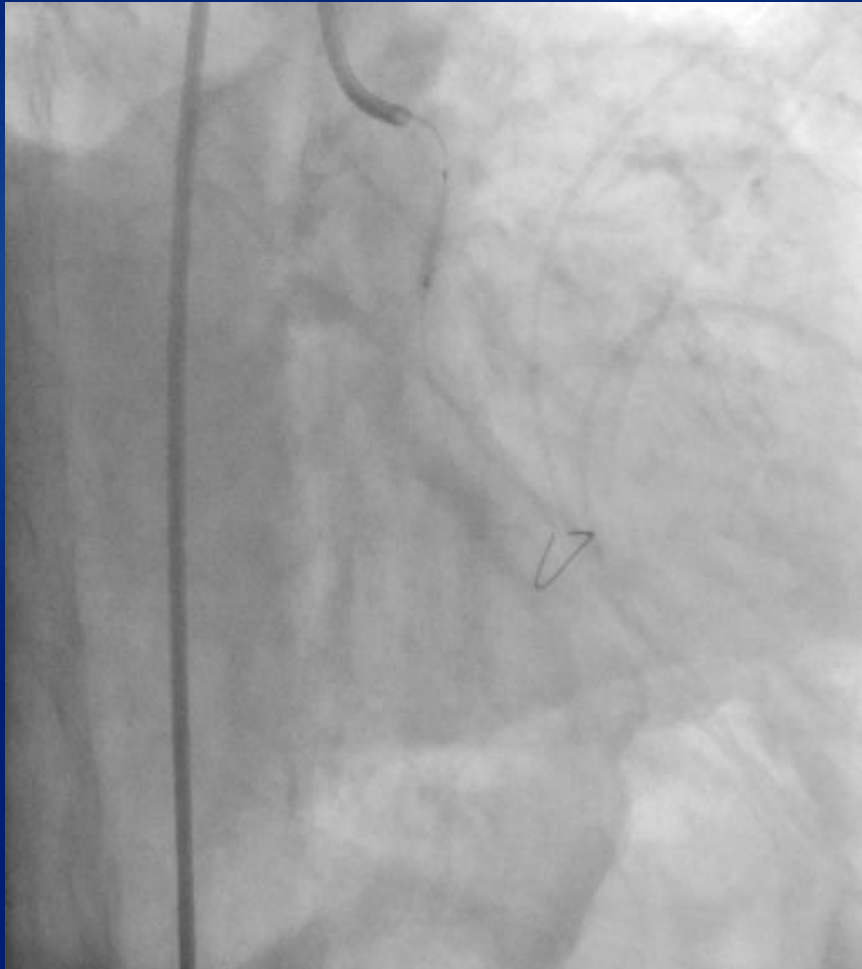
successful revascularization of RCA lesion

PCI for LCX



6Fr XB 3.5 catheter + 0.014 Runthrough wire + IVUS

Ballooning



pre-dilated the LCX using a Ryujin 2.0x15mm & Biomatrix stent 3.5 x 14mm

Stent dislodgement



A Biomatrix stent 3.5x14 mm was located at the edge of the XB guiding catheter

Case Report

HOW SHOULD I TREAT?

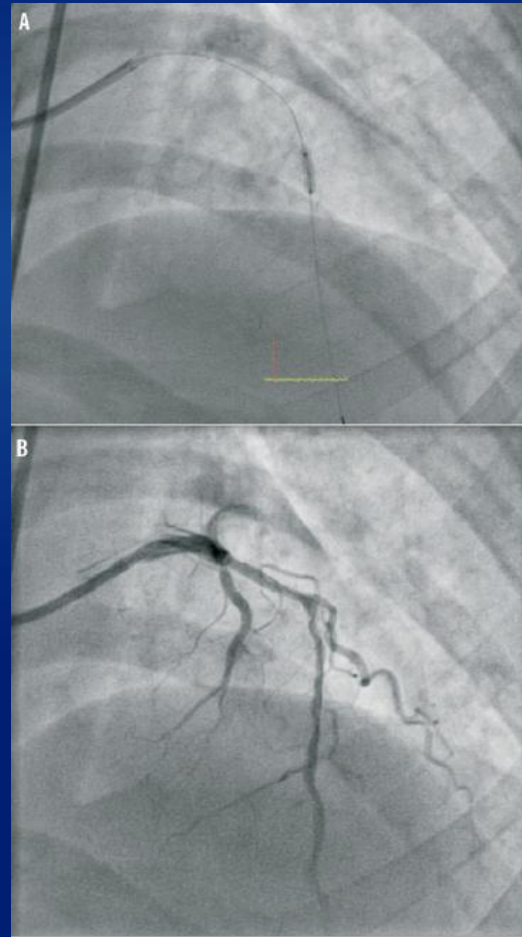
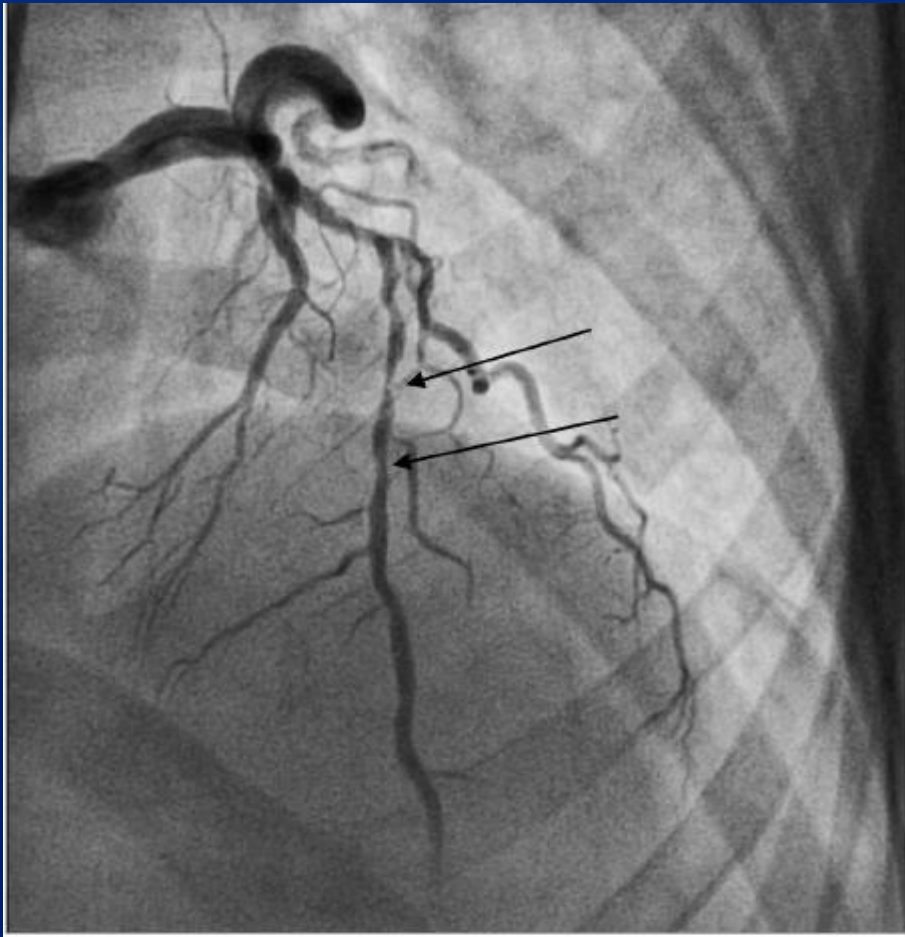
How should I treat stent dislodgement in a STEMI patient resulting in dissection of left main and left circumflex arteries?

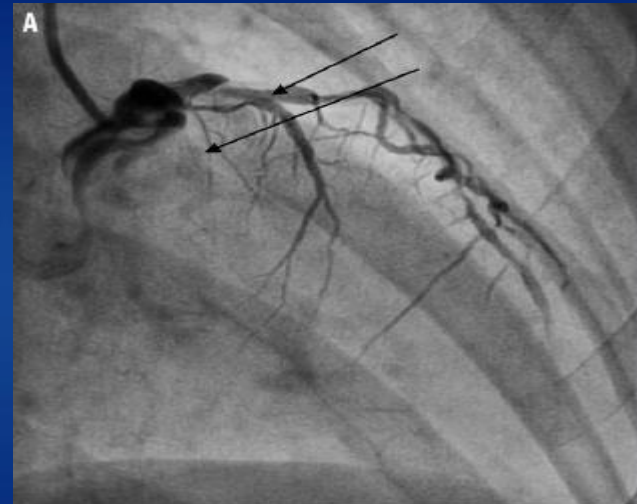
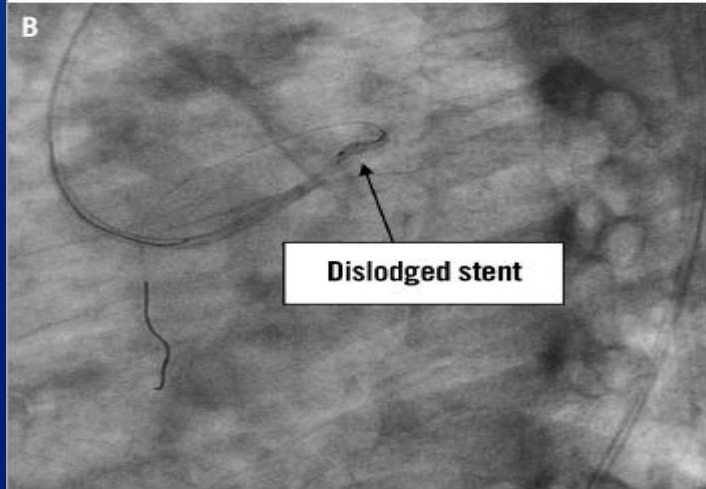
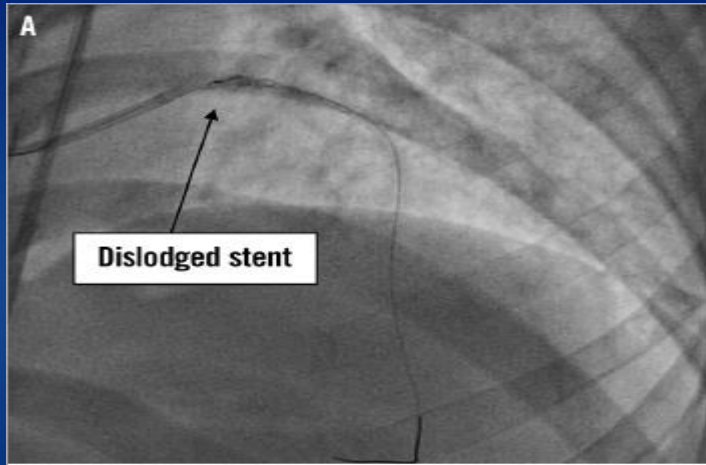
Sanjay K Kohli¹, MD, MRCP (UK); Yeong Phang Lim¹, MB, BChir, FRCS; Siang Hui Lai², MBBS, FRCPath; Jack Wei Chieh Tan^{1*}, MBBS, MRCP (UK)

1. National Heart Centre, Singapore, Singapore; 2. SingHealth Residency, Singapore, Singapore

Invited Experts: David Taggart^{1}, MD, PhD, FRCS; Raj Kharbanda¹, PhD, MRCP; Didier Carrié^{2*}, MD, PhD, FESC; Nicolas Boudou², MD*

1. Oxford University Hospitals Trust, Oxford, United Kingdom; 2. Department of Cardiology, Hôpital Rangueil, Toulouse, France



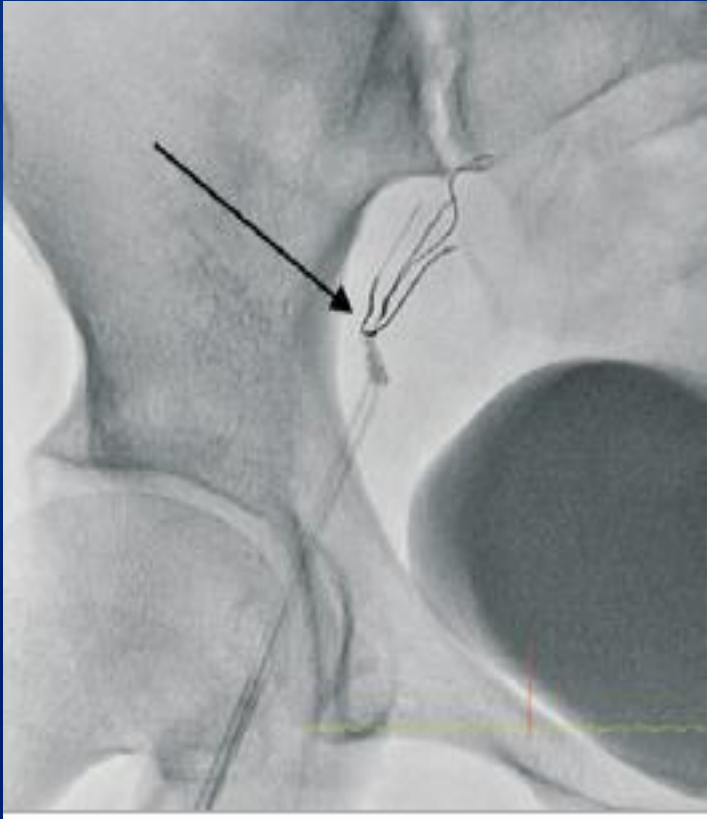




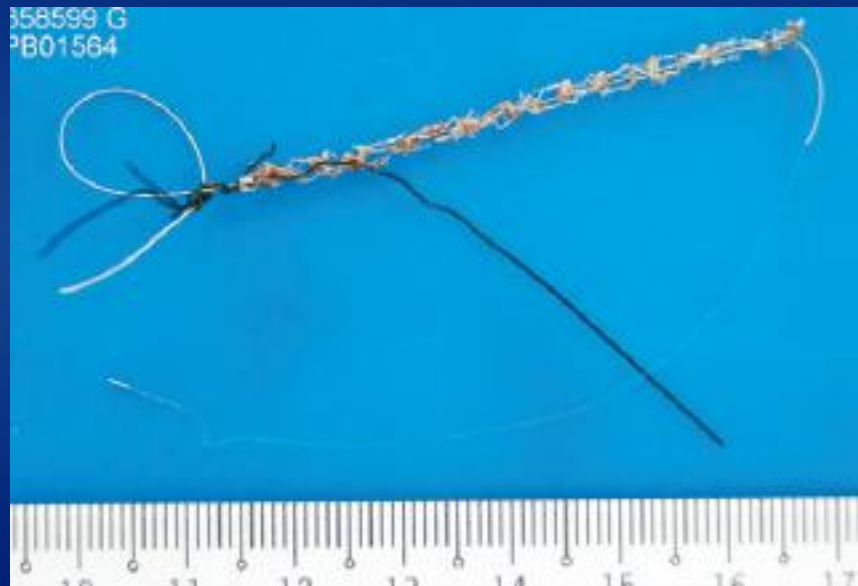
Prior to transfer to the operating room a short bare metal stent, Vision 3.5 × 12 mm was deployed to cover the proximal left circumflex dissection flap restoring. The patient was reviewed by the on-call cardiothoracic surgical consultant. Emergency CABG was agreed to be the best management strategy with the insertion of an intra-aortic balloon pump

The patient was transferred to the operating room for urgent single-vessel CABG (saphenous vein graft to LAD) and surgical removal of the dislodged coronary stent from the right groin.

She was discharged home seven days later. On subsequent review seven months later she remains asymptomatic with a negative stress myocardial perfusion scan for ischaemia.



Two additional wires were inserted and a knot was made in the distal LAD with counter-clocking of the distal wires upon each other. Forceful pullback of the knotted wires enabled removal of the stent from the LMCA. However, the dislodged stent was too large to pass through a right groin 6 Fr sheath. The left groin was punctured with an 8 Fr sheath to retrieve the dislodged stent from the contralateral groin. Further angiography showed acute occlusion of the proximal LAD. The patient became symptomatic with chest pain, further ST-segment elevation on ECG and rapidly developed cardiogenic shock

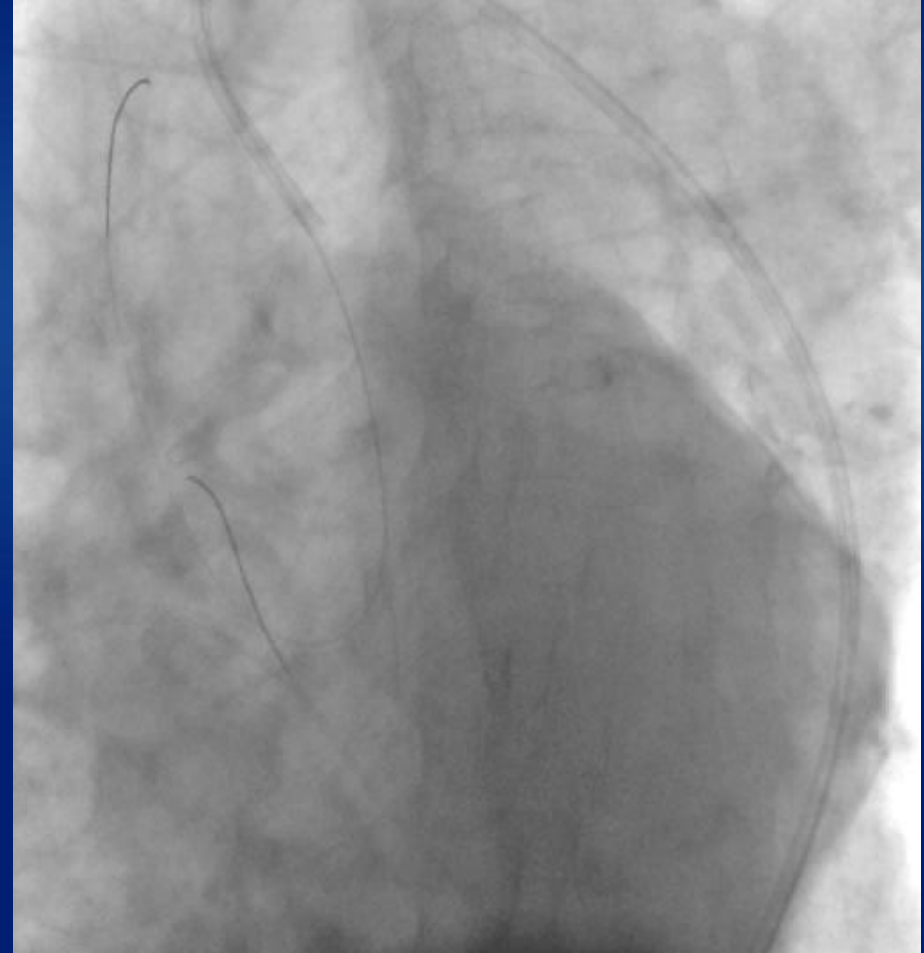


Surgical removal of the dislodged coronary stent from the right groin.

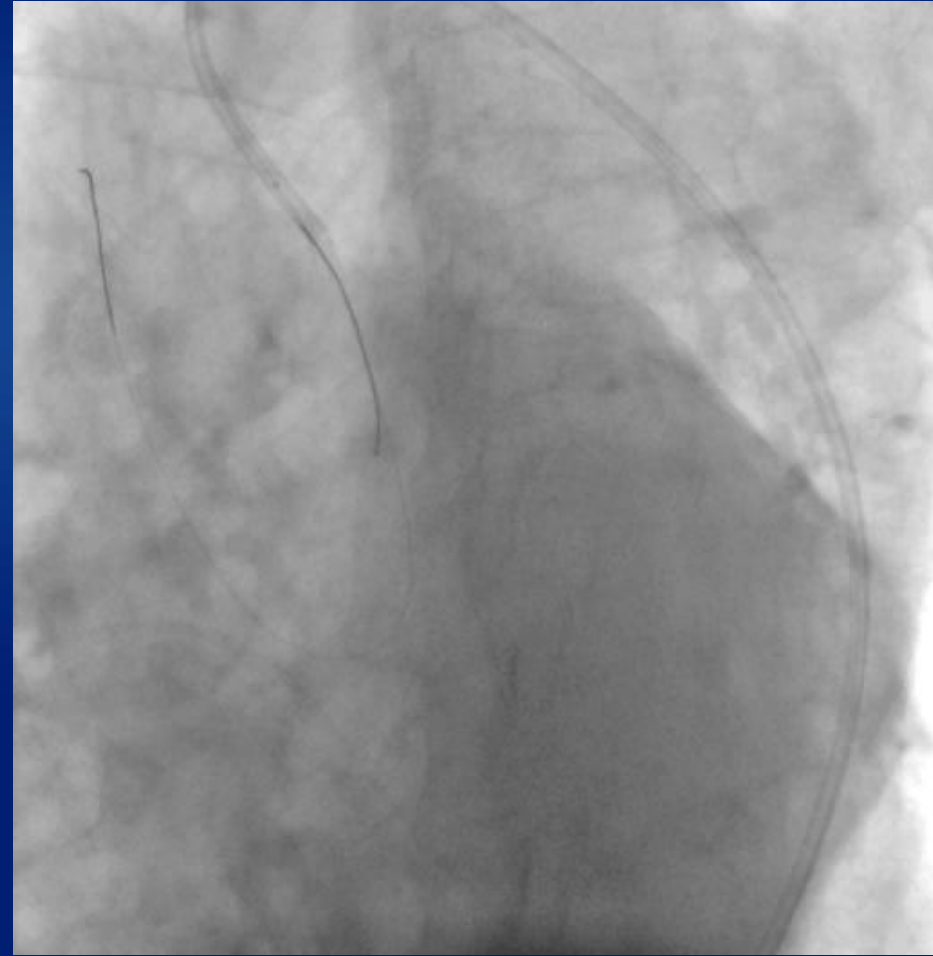
Two 0.014 guidewire



Two 0.014 guidewire

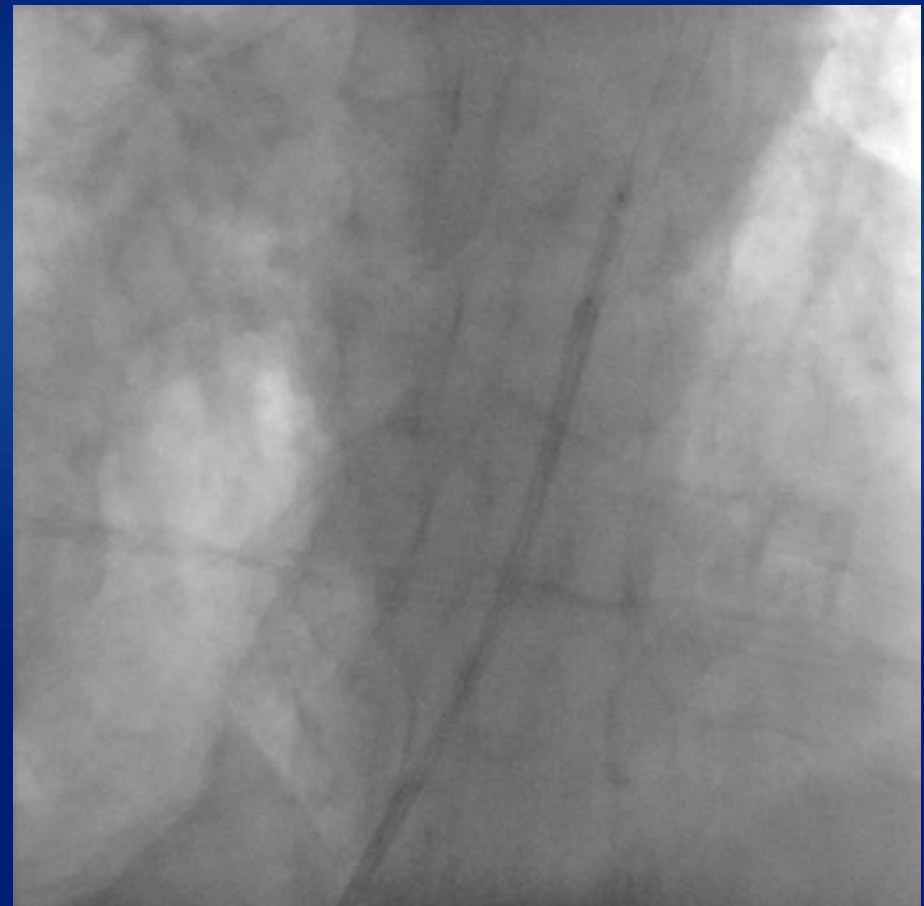


Small Balloon



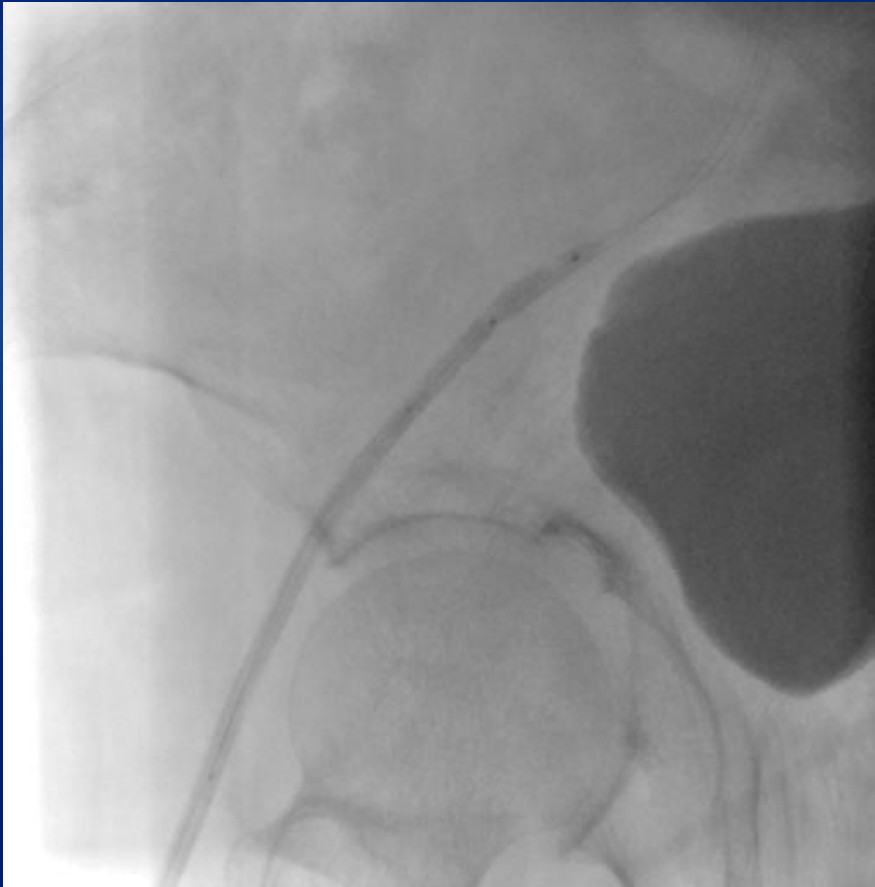
1.25 X 6 mm balloon between the dislodgement stent

Balloon



2.0 X 15 mm, 2.5 X 20 mm balloon between the dislodgement stent

Right common femoral artery



But the dislodgement stent could not be entered into the guiding catheter.

Biopsy forcep



Biopsy Forceps - Large Cup with Needle

Catalog #	Single Use Only	Minimum Channel Size (mm)	Working Length (cm)
FB-13U-1	No	3.7	230

Product Information:

Compatible Instruments: CF
Autoclavable: Yes

Cup Opening (mm): 8
Sterile: No

Description:

Designed to minimize tissue damage.



Biopsy Forceps - Rat Tooth Elongated Cup

Catalog #	Single Use Only	Minimum Channel Size (mm)	Working Length (cm)
FB-56D-1	No	1.2	115

Product Information:

Compatible Instruments: BF, CHF
Autoclavable: Yes

Cup Opening (mm): 7.3
Sterile: No

Description:

Designed to minimize tissue damage.



Biopsy Forceps - Standard Fenestrated

Catalog #	Single Use Only	Minimum Channel Size (mm)	Working Length (cm)
FB-19C-1	No	2	105

Product Information:

Compatible Instruments: BF
Autoclavable: Yes

Cup Opening (mm): 4
Sterile: No

Description:

Designed to minimize tissue damage.
Provides large sample.

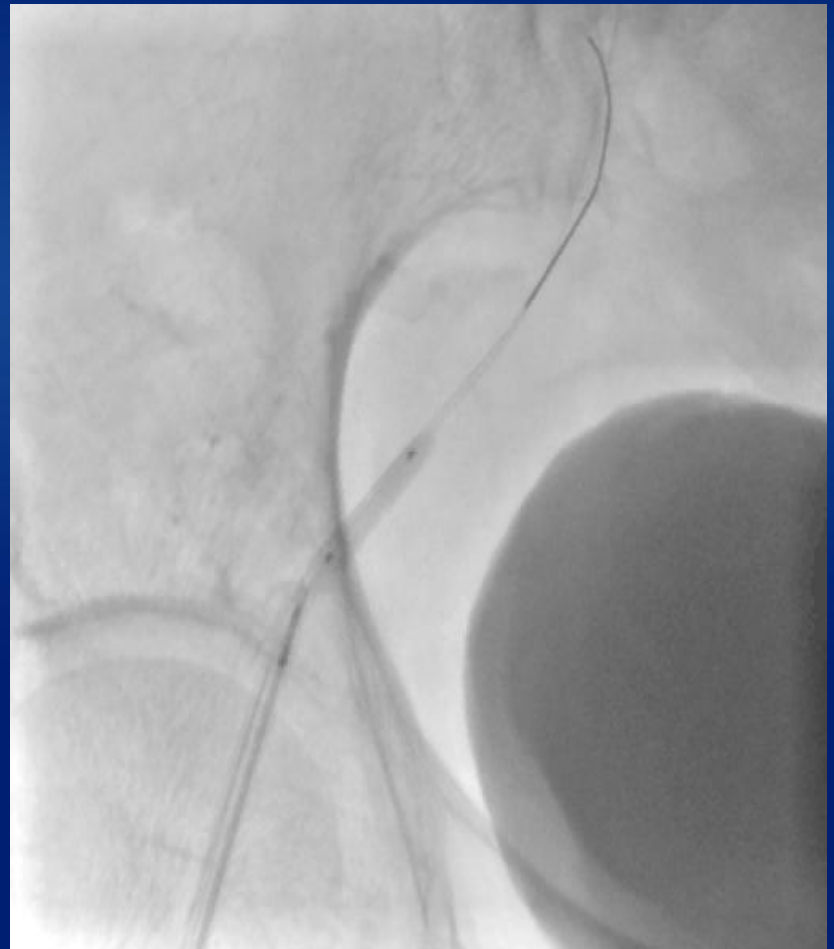
using the Biopsy forcep (1.2mm FB-56D-1, Olympus) that was available at 6F guiding catheter.

Biopsy forcep



using the Biopsy forcep (1.2mm FB-56D-1, Olympus) that was available at 6F guiding catheter.

Failure



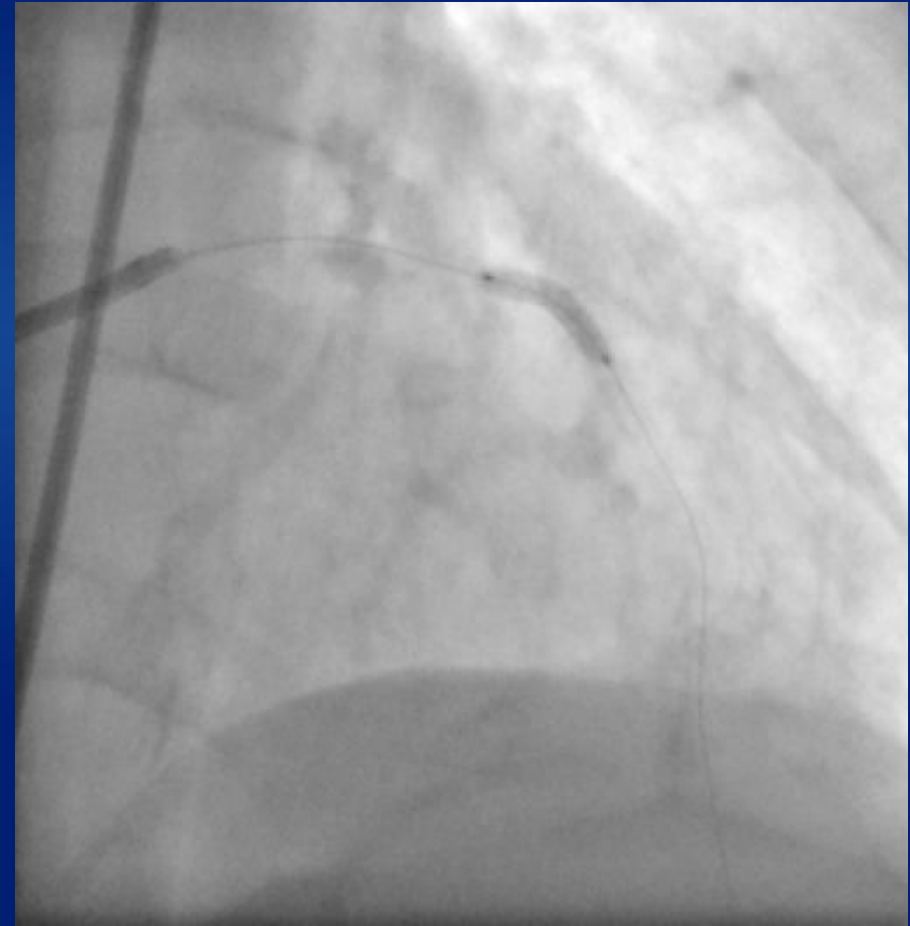
Biopsy forcep could not be caught complete the dislodgement stent.

1st day final CAG



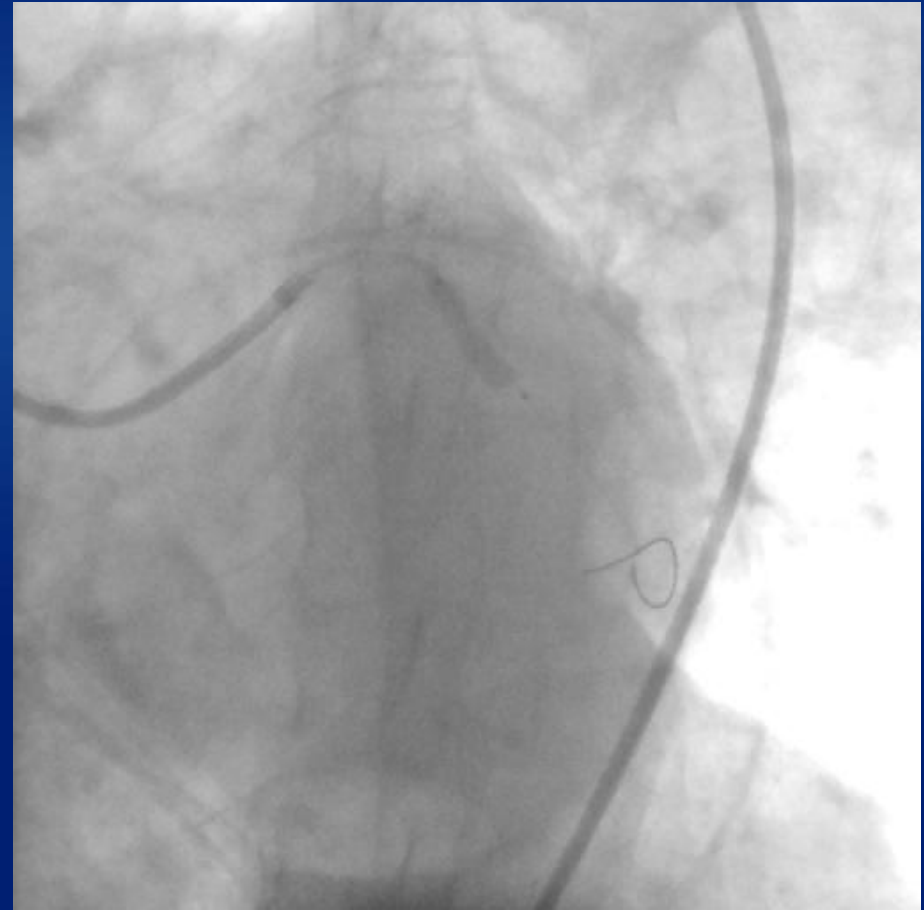
A dislodgement stent was remained Rt. femoral artery

2nd day PCI for LAD



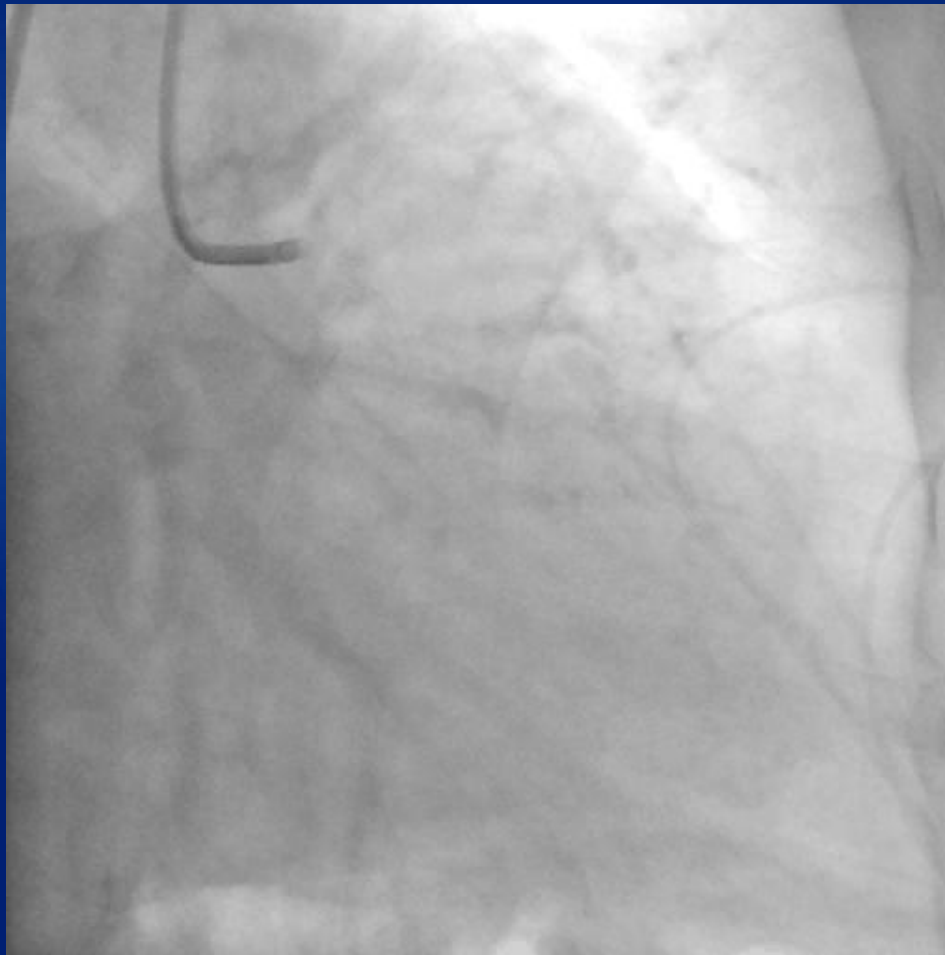
pre-dilated the LCX using a Ryujin 2.0x15mm and Biomatrix stent 2.5x14 mm

2nd day PCI for LCX



Biomatrix stent 3.5x14 mm

2nd day final CAG



Successful revascularization of LAD and LCX lesion

Case Report

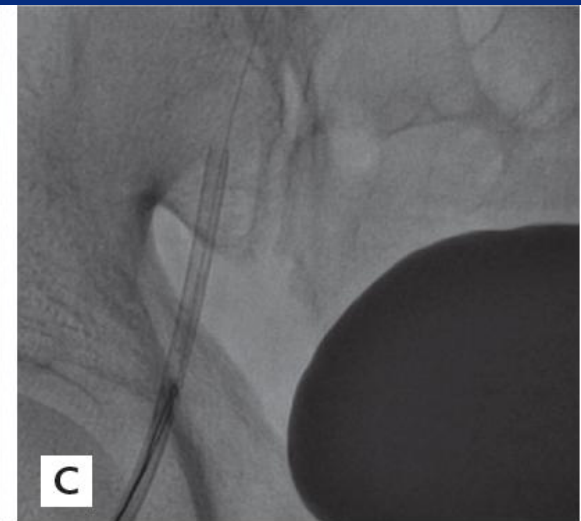
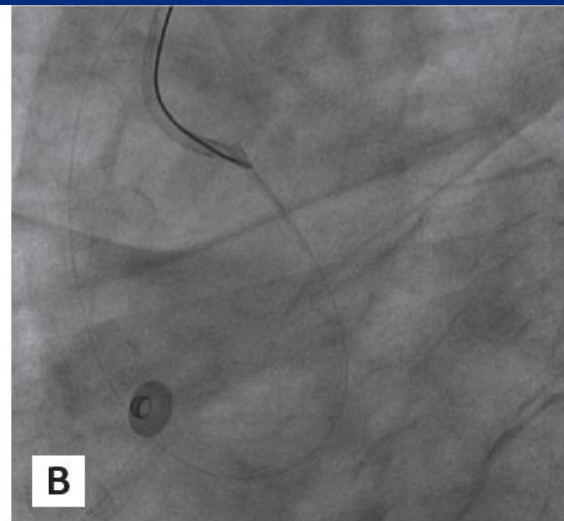
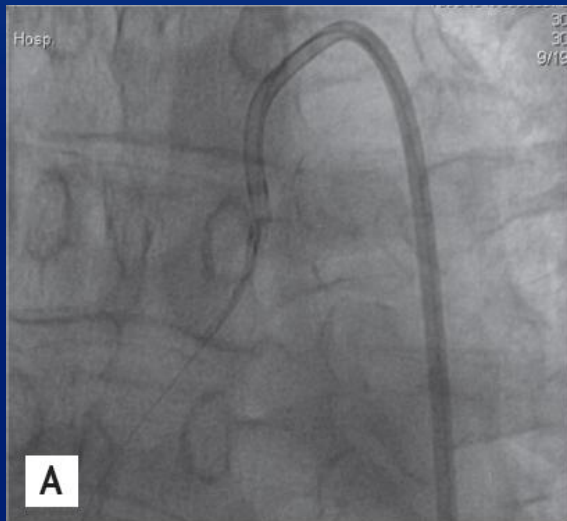
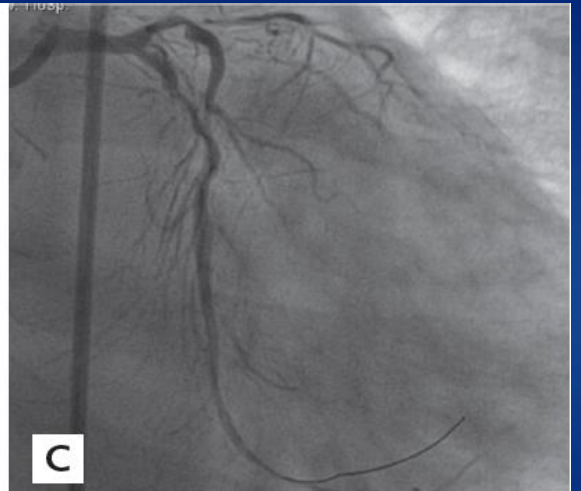
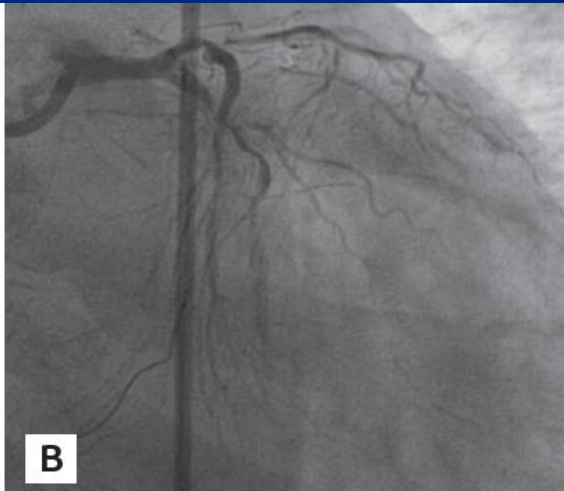
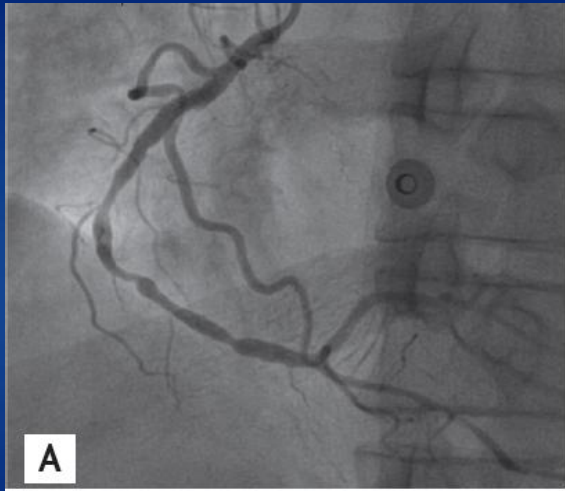
CASE REPORT

Korean J Intern Med 2013;28:481-485
<http://dx.doi.org/10.3904/kjim.2013.28.4.481>



Successful coronary stent retrieval from the ascending aorta using a gooseneck snare kit

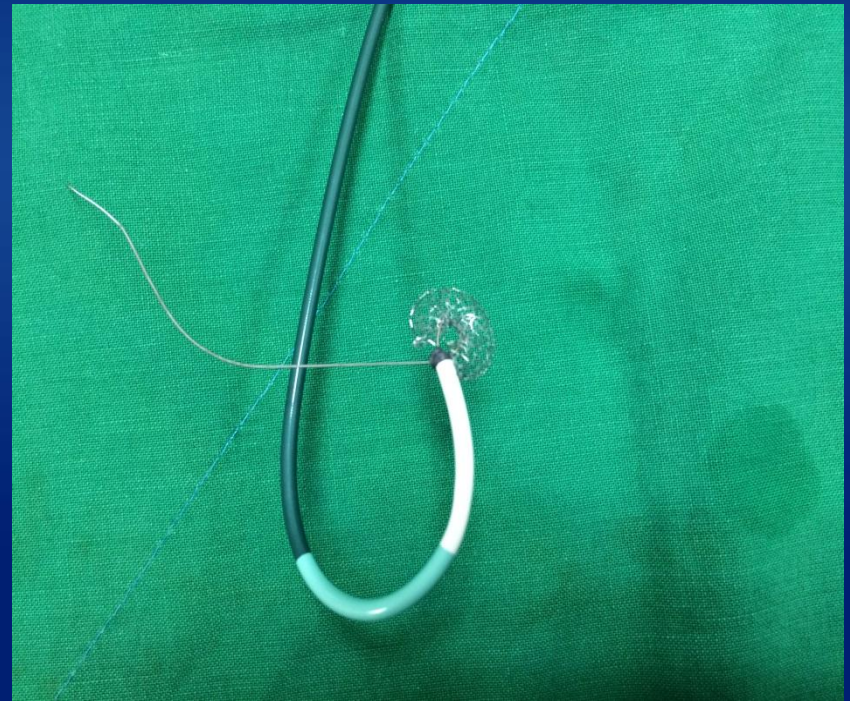
Ji-Hun Jang, Seong-Ill Woo, Dong-Hyeok Yang, Sang-Don Park, Dae-Hyeok Kim, and Sung-Hee Shin





- The snare and stent could not be withdrawn into the guide catheter, and consequently, the snared stent with the guide catheter was removed from the femoral artery sheath
- Close examination of the retrieved stent revealed severe distortion, which could explain the difficulty encountered while attempting to retrieve it into the guide catheter

Shape deformation and Structural distortion



Cordis VISTA BRITE TIP®

Multi-Segment Design

A variation of design and materials to balance strength and flexibility promoting:

- Coaxial alignment
- Kink resistance
- Support

Kink Resistant Segment

The segment absorbs the kink forces between the firm shaft and the soft distal segments.

The BRITE TIP®

The BRITE TIP® is ultra-soft to ensure safe engagement.

Coaxial Segment

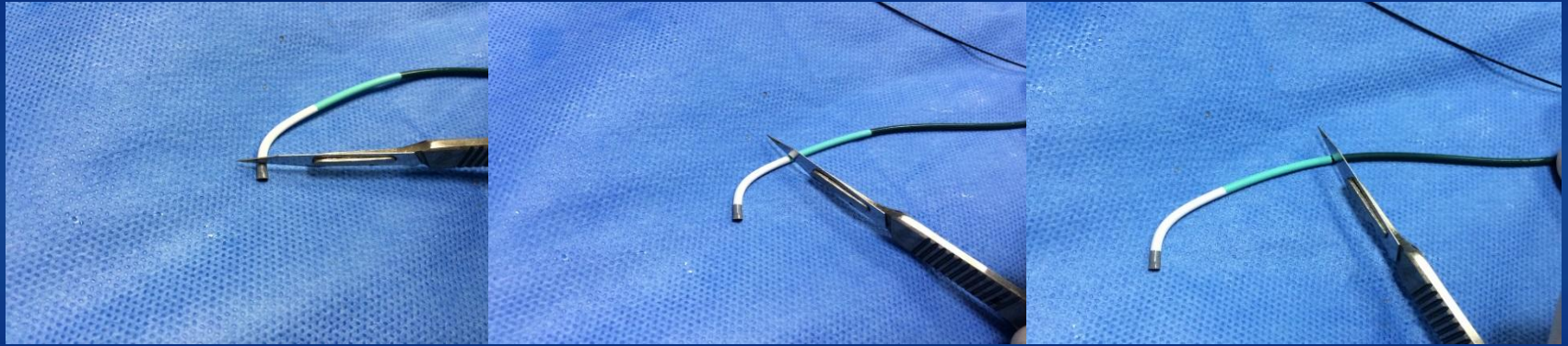
This soft braided segment optimizes tip flexibility and provides gentle cannulation.

Torque/Support Segment

This segment delivers a 1:1 transfer of torsional and lateral force from hub to distal end. Moreover, it ensures a solid foundation for support.



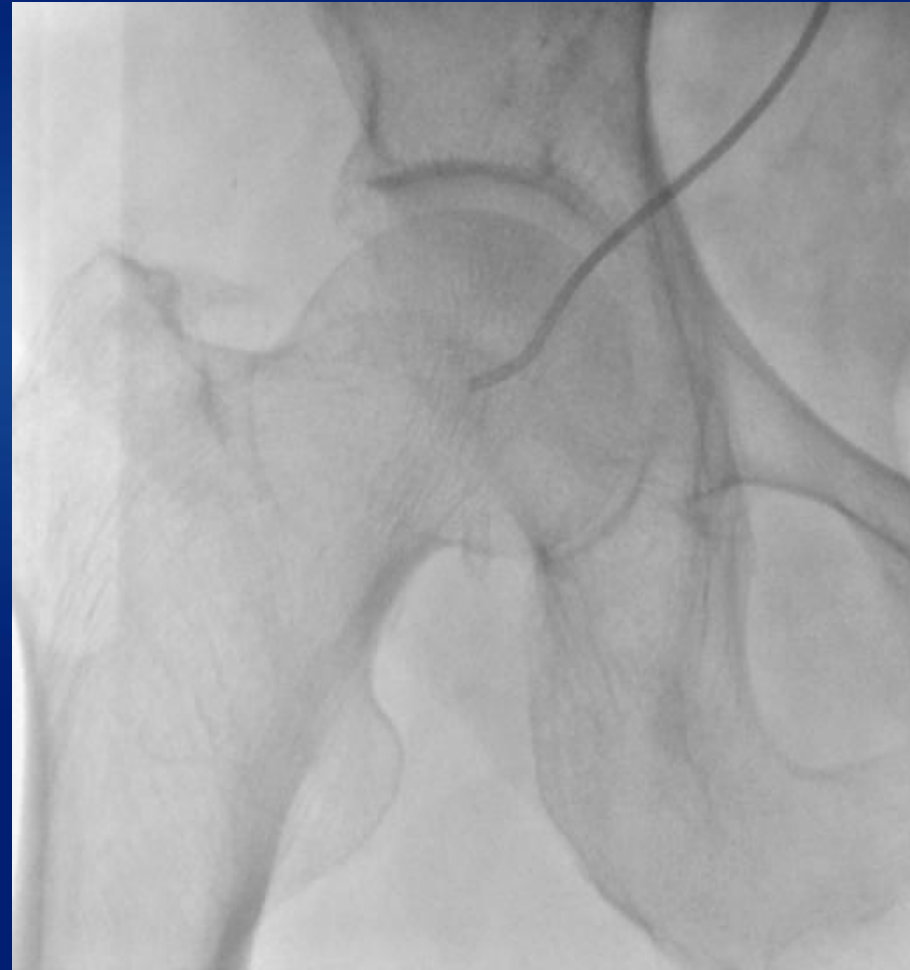
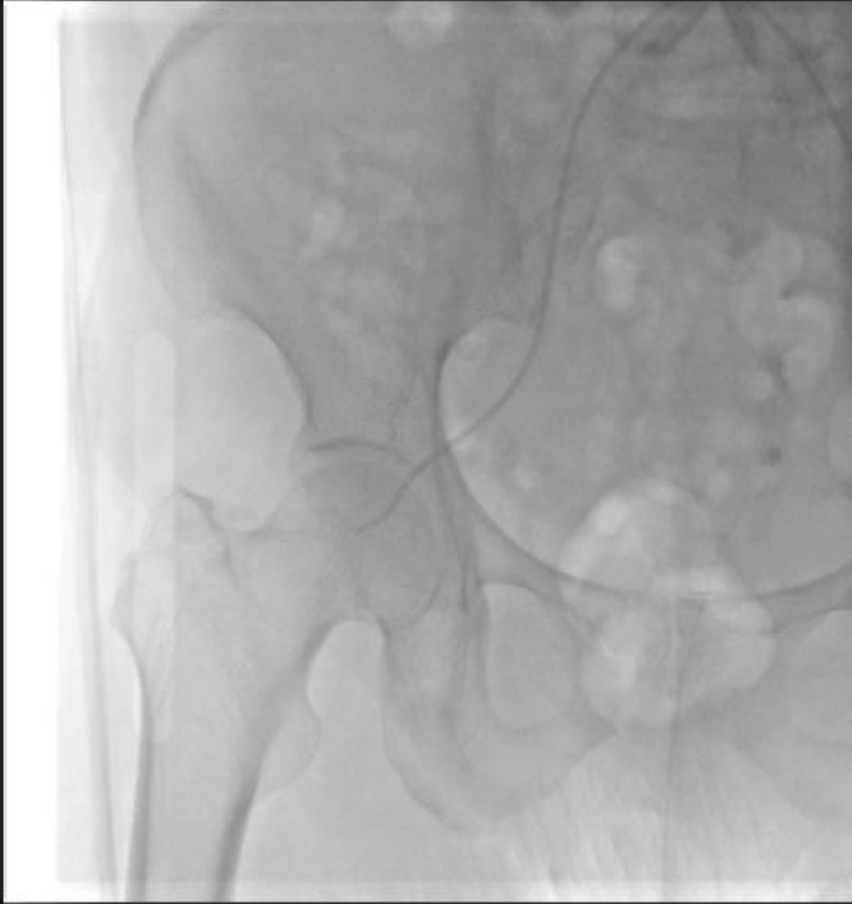
Cut GC technique



Cut GC technique

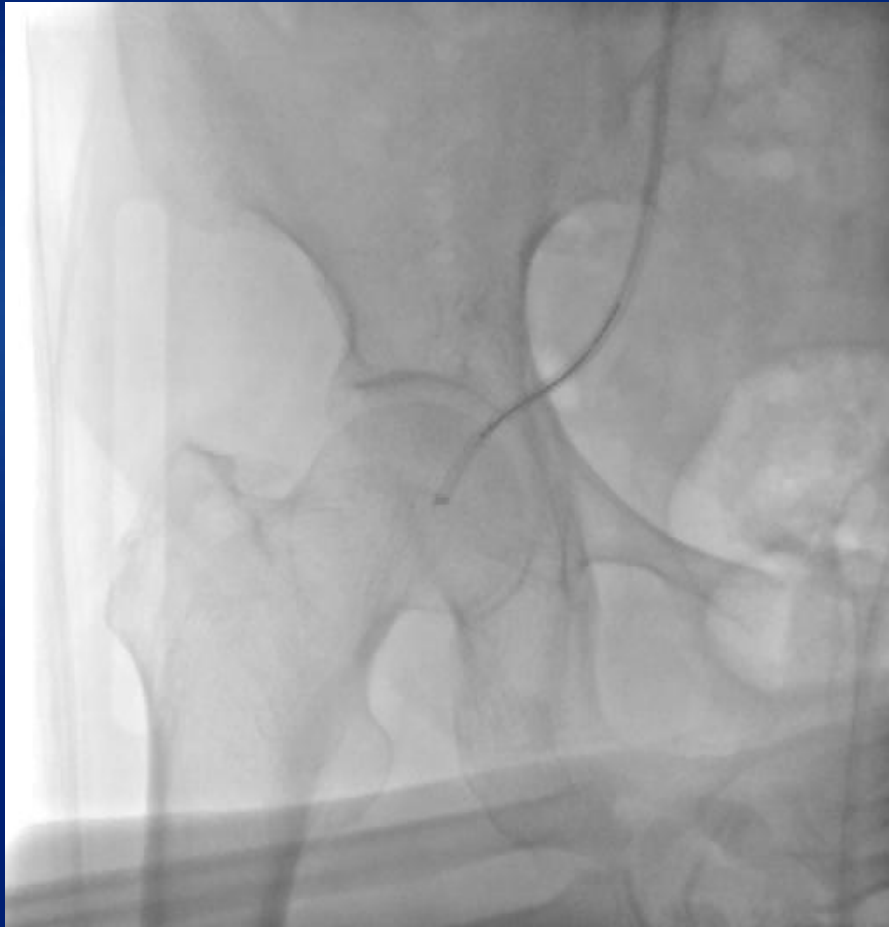


Retrograde approach



Multi-snare Set 10mm (pfm medical) was successful advanced into the 7 Fr XB guiding catheter

Snare-catheter



The dislodgement stent was successful retrieved using Multi-snare Set 10mm

Retrieved Stent



The dislodgement stent was successful retrieved using Multi-snare Set 10mm

Summary

We could treat the dislodgement stent using Cut GC technique without complication

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Thank You