

A tough nut to crack

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Disclosures

- None

History

Diagnosis:

79/ male

Co-morbidities : HTN, DM on insulin, ESRF on regular haemodialysis 2,4,6 (Pantai Hospital)

Localised prostate cancer 2011

- cT3bN0M0 PSA 21.63 Gleason 3+4

- ADT Nov 2011 - Oct 2013

- radical RT to prostate 70Gy/35# (PPUKM) completed June 2012

- nadir PSA 0.02 - 0.06 till Jan 2014

Biochemical relapse Sep 2014

- PSA 3.77

- BS June 2015 : no mets

- unable to do MRI due to claustrophobia

- discussed in Uro onco MDT 27/8/16 : for watchful waiting

PSA progression

- 17.57 (Jul 2016) --> 20.67 (Oct 2016) --> 35.86 (Feb 2017) --> 46 (Apr 2017)-->72 (August 2017) --> 119 (November

>122.2 (Dec 2017) -> 191.4 (7/5/18) --> 431 (8/8/18) --> 565 (10/10/18)

- Bone scan 27/11/17 No scintigraphy evidence of bone metastasis.

- CTTAP 30/10/17: Non-specific lung nodules.

- Planned to initiate ADT In Dec 2017-->However developed NSTEMI in January 2018 and

Angioplasty done on 27.2.2018

- Bone scan 1/8/18 - No bone metastases

- NSTEMI in July 2018, angiogram and 2 vessels stented

Case discussed in MDT

- Offer Degarelix (lowest risk of cardiac complication)

Plan:

Explained to patient that MDT consensus is Degarelix has the lowest risk of cardiac complications

Thorough discussion with patient about whether to start Degarelix now or when he is symptomatic.

He is currently asymptomatic besides occasional low back pain. PSA is increasing in trend.

Once he get started on ADT then likely will be lifelong.

Patient opts to continue watchful waiting, then to introduce degarelix when he becomes asymptomatic.

Plan

See 2 months with PSA

79, Male

Hypertension

Diabetes

Hemodialysis

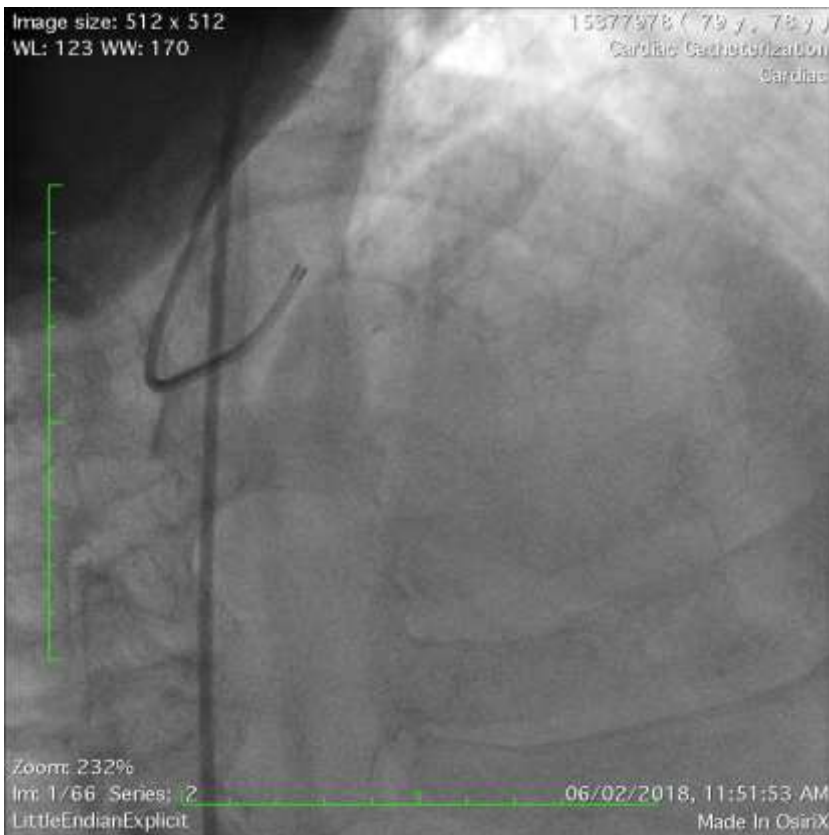
Prostate Cancer

Jan 18: NSTEMI

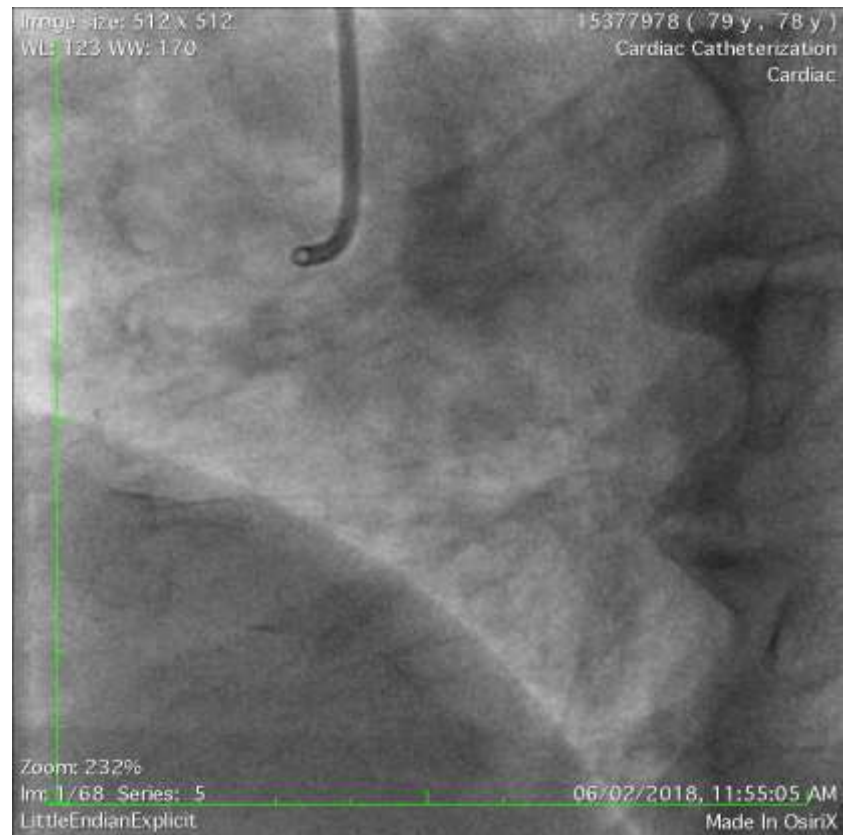
Unstable during
HD

Diagnostic Angio 6.2.18

**Tight calcified prox LAD
Diseased OM**



**Functional CTO prox/mid RCA
Collaterals seen to LAD**

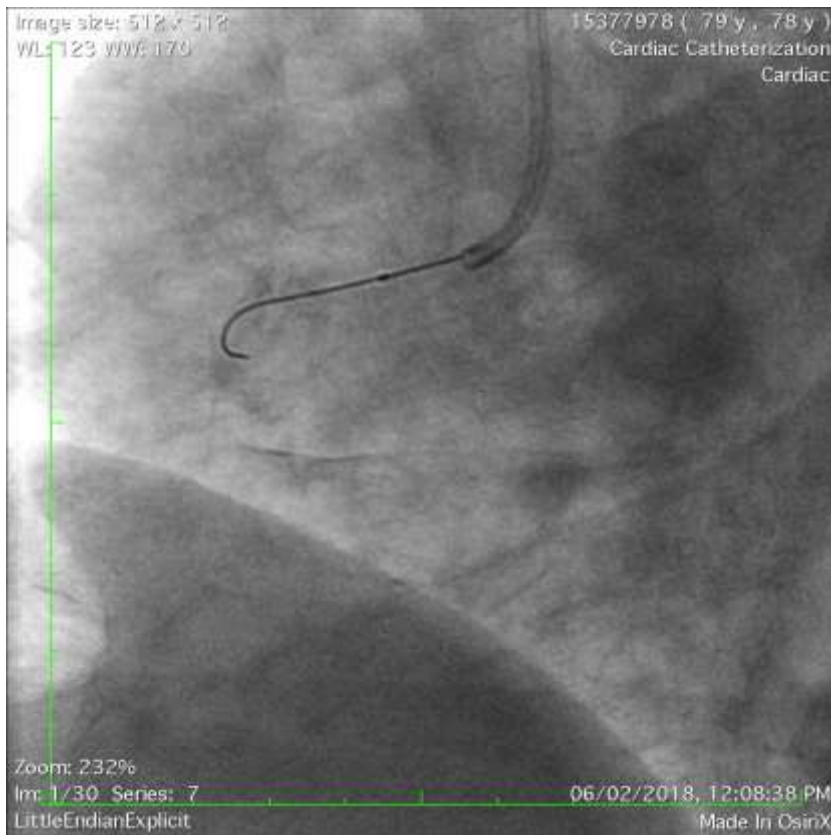


Family conference immediately

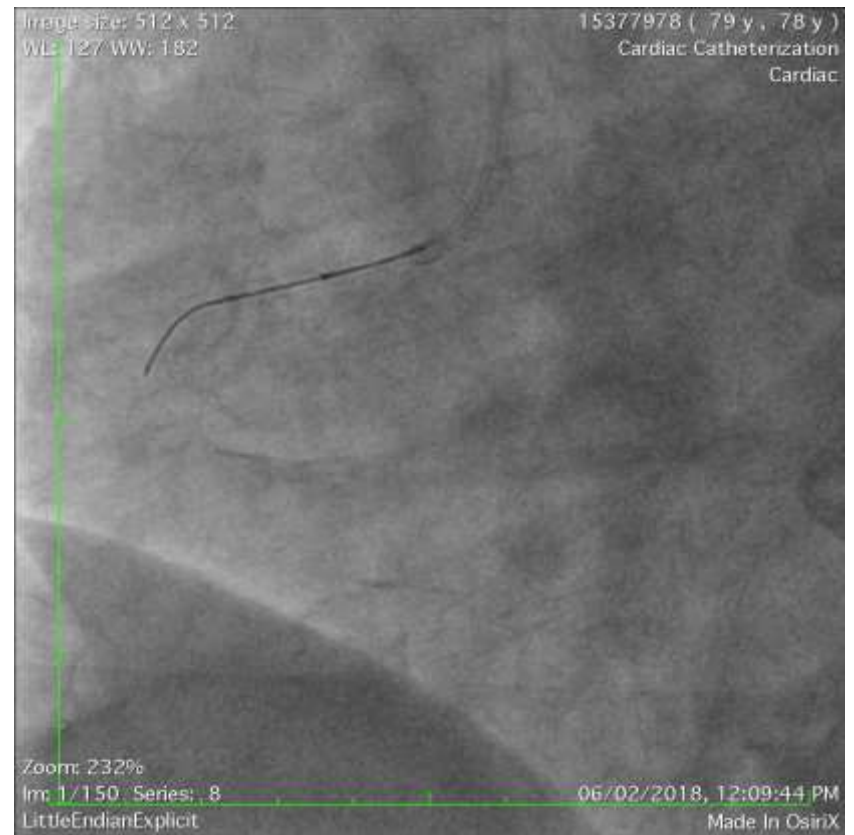
- Risks and treatment options explained.
 - Proceed with PCI as patient is very symptomatic
 - Did not consent for high risk intervention especially for rotablation
-
- Discussion among peers held as to which lesion to do first.
 - Since calcified lesion, LAD deferred and RCA done first.

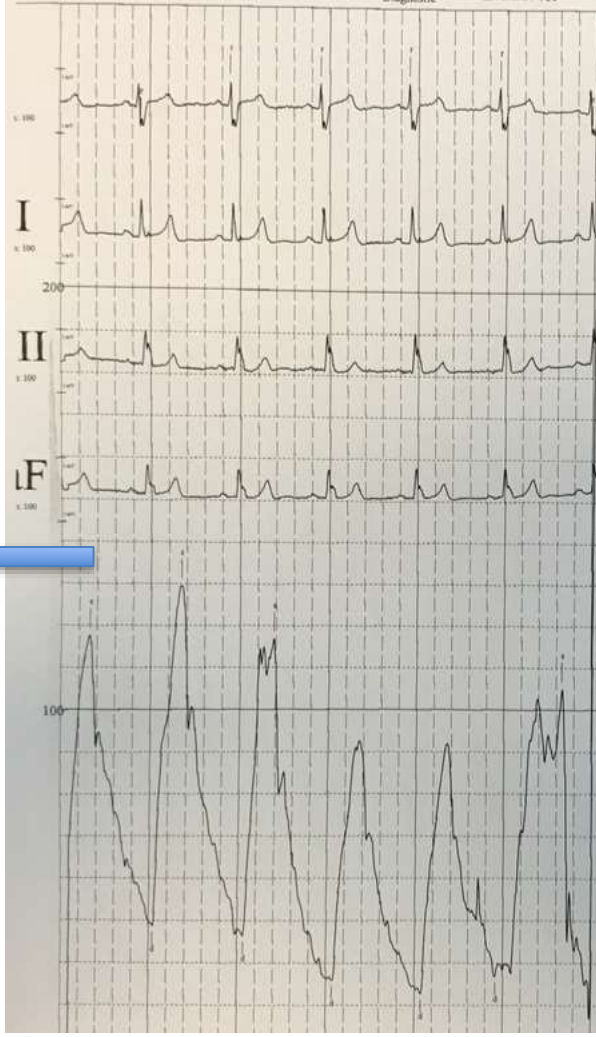
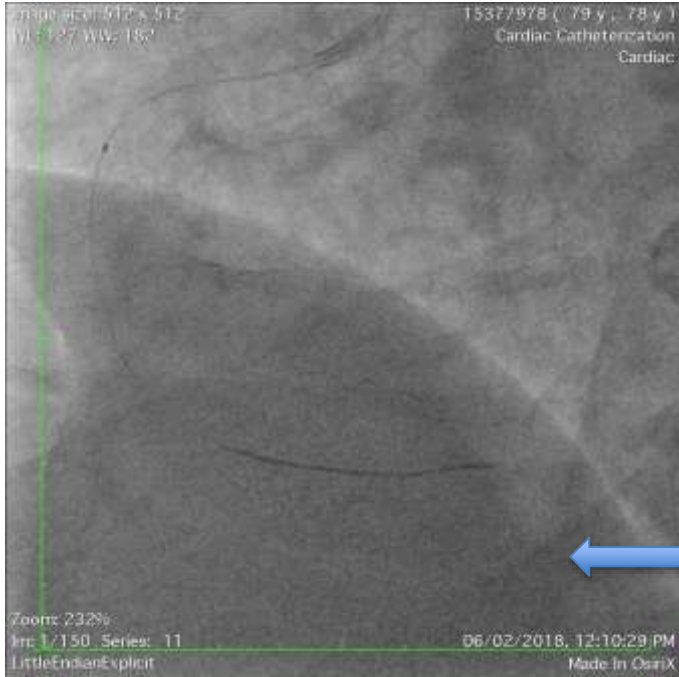
Proceeded with RCA PCI

Wire with ballon support, Fielder FC, functional CTO, some calcium seen



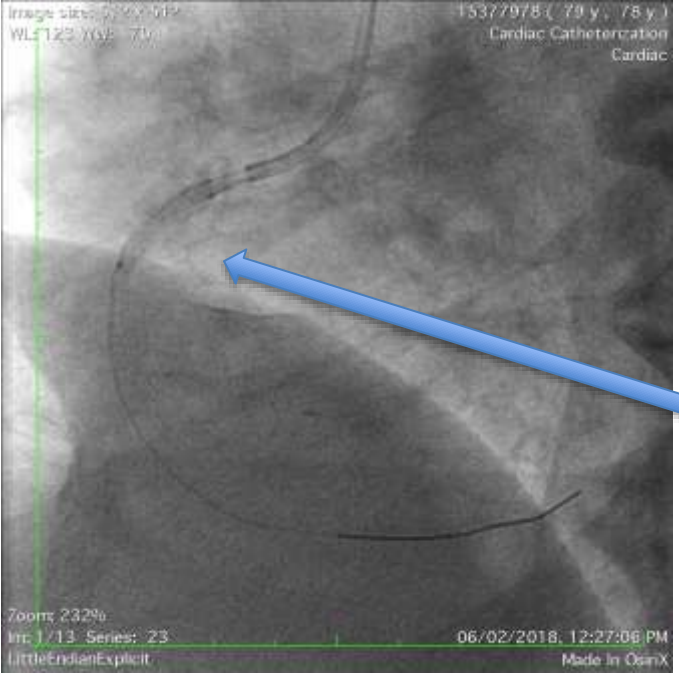
Side hole catheter as ostial RCA disease





Patient consented on 02/05/2018 (Entered By: UMMC, UMMC ICL Admin)
 Patient arrived to procedure lab (Entered By: UMMC, UMMC ICL Admin)
 Patient prepped and draped (Entered By: UMMC, UMMC ICL Admin)
 Physician arrived (Entered By: UMMC, UMMC ICL Admin)
 Local anesthetic to right femoral region with Lidocaine 1% (Entered By: UMMC, UMMC ICL Admin)
 6F sheath inserted into right femoral artery (Entered By: UMMC, UMMC ICL Admin)
 Diagnostic Guide Wire inserted 0.035X150 JTIP (Entered By: UMMC, UMMC ICL Admin)
 Diagnostic Catheter inserted JL 3.5 6F (Entered By: UMMC, UMMC ICL Admin)
 Cardiac Angiography of LCA performed in multiple view (Entered By: UMMC, UMMC ICL Admin)
 Diagnostic Catheter inserted JR 3.5 6F (Entered By: UMMC, UMMC ICL Admin)
 Cardiac Angiography of RCA performed in multiple view (Entered By: UMMC, UMMC ICL Admin)
 Diagnostic Catheter removed (Entered By: UMMC, UMMC ICL Admin)
 Vessel: Right Coronary Artery (Entered By: UMMC, UMMC ICL Admin)
 Guide Catheter intubated JR 3.5 6F SH (Entered By: UMMC, UMMC ICL Admin)
 Guide Wire inserted FIELDER FC (Entered By: UMMC, UMMC ICL Admin)
 Balloon inserted TAZUNA 1.5X15mm (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 12 atm - 9 secs pRCA (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 18 atm - 12 secs (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 18 atm - 9 secs (Entered By: UMMC, UMMC ICL Admin)
 Balloon withdrawn (Entered By: UMMC, UMMC ICL Admin)
 Stent inserted ULTIMASTER 2.75X15mm (Entered By: UMMC, UMMC ICL Admin)
 Stent removed unable to cross (Entered By: UMMC, UMMC ICL Admin)
 Balloon inserted HAWK 2.5X15mm (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 10 atm - 12 secs pRCA (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 14 atm - 18 secs (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 14 atm - 12 secs (Entered By: UMMC, UMMC ICL Admin)
 Balloon withdrawn (Entered By: UMMC, UMMC ICL Admin)
 Balloon inserted SCOREFLEX 2.25X15mm (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 20 atm - 19 secs pRCA (Entered By: UMMC, UMMC ICL Admin)
 Balloon withdrawn (Entered By: UMMC, UMMC ICL Admin)
 Balloon inserted SCOREFLEX 2.5X15mm (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 10 atm - 6 secs pRCA (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 10 atm - 6 secs (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 14 atm - 16 secs (Entered By: UMMC, UMMC ICL Admin)
 Balloon withdrawn (Entered By: UMMC, UMMC ICL Admin)
 Guide Wire inserted CHOICE PT EXTRA SUPPORT (Entered By: UMMC, UMMC ICL Admin)
 Balloon inserted FLEXTOME 2.0X15mm (Entered By: UMMC, UMMC ICL Admin)
 Balloon withdrawn (Entered By: UMMC, UMMC ICL Admin)
 Balloon inserted NC EUPHORA 2.25X15mm (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 20 atm - 12 secs pRCA (Entered By: UMMC, UMMC ICL Admin)
 Balloon withdrawn (Entered By: UMMC, UMMC ICL Admin)
 Balloon inserted NSE ALPHA 2.0X13mm (Entered By: UMMC, UMMC ICL Admin)
 Balloon withdrawn (Entered By: UMMC, UMMC ICL Admin)
 Balloon inserted SCOREFLEX 2.5X15mm (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 20 atm - 22 secs pRCA (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 10 atm - 12 secs (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 15 atm - 8 secs (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 12 atm - 15 secs (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 10 atm - 8 secs (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 20 atm - 10 secs (Entered By: UMMC, UMMC ICL Admin)
 Balloon withdrawn (Entered By: UMMC, UMMC ICL Admin)
 Balloon inserted SCOREFLEX 1.75X15mm (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 18 atm - 11 secs pRCA (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 20 atm - 16 secs (Entered By: UMMC, UMMC ICL Admin)
 Balloon withdrawn (Entered By: UMMC, UMMC ICL Admin)
 IVUS OPTICROSS catheter advanced (Entered By: UMMC, UMMC ICL Admin)
 IVUS catheter removed UNABLE TO CROSS (Entered By: UMMC, UMMC ICL Admin)
 Guide Wire removed (Entered By: UMMC, UMMC ICL Admin)

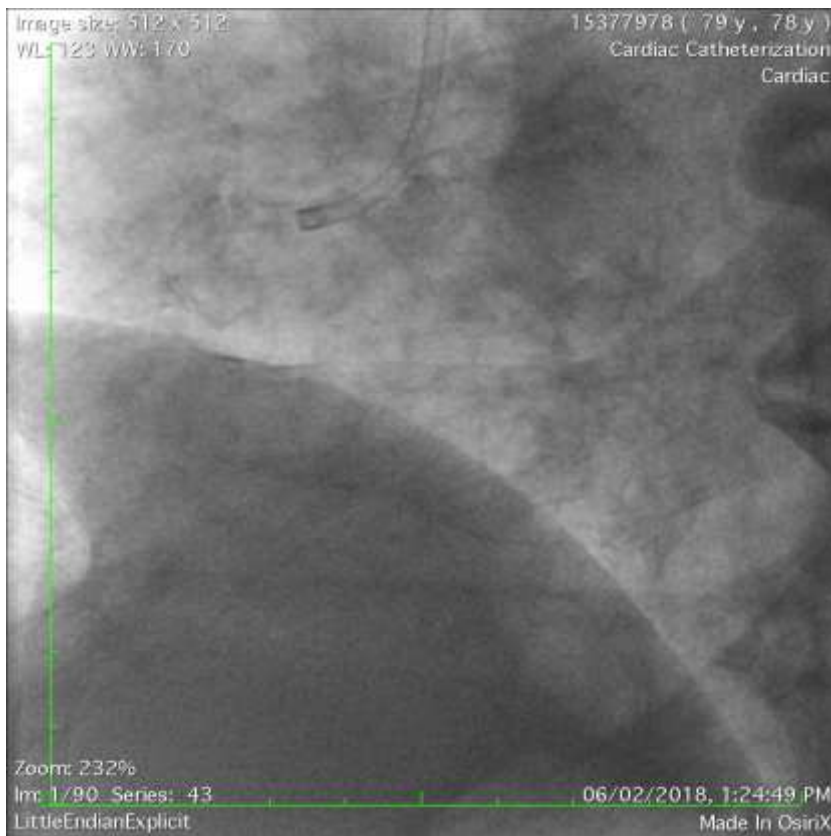
Can't fully expand balloons



Procedure abandoned – requested by patient

Highly fibrotic lesion

Under-estimated the lesion



Family conference

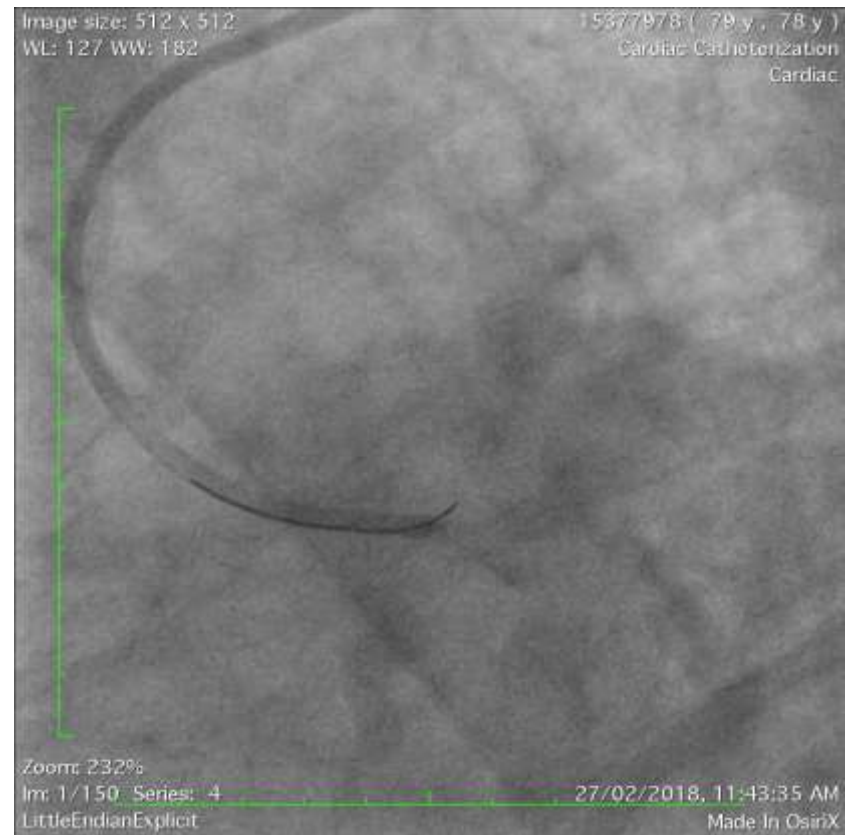
- Referred to CTS but rejected due to prostate cancer
- Still not able to tolerate HD
- Risks explained and this time consent given to try the LAD.
- Rotablation only as last option and avoided if possible.

27.2.18

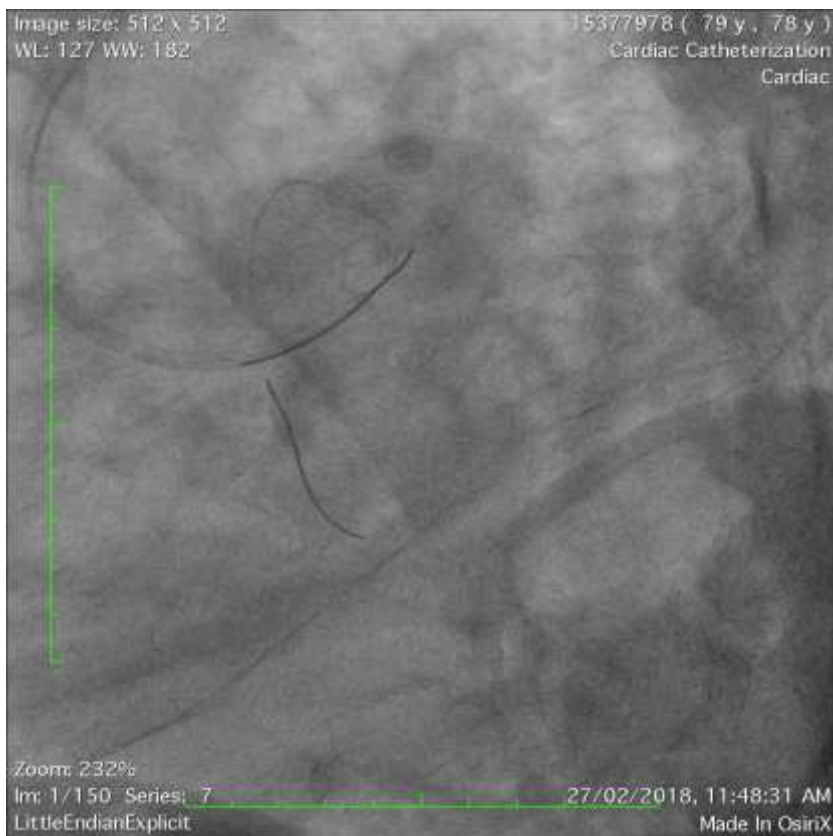
7F femoral access
Difficult to engage catheter



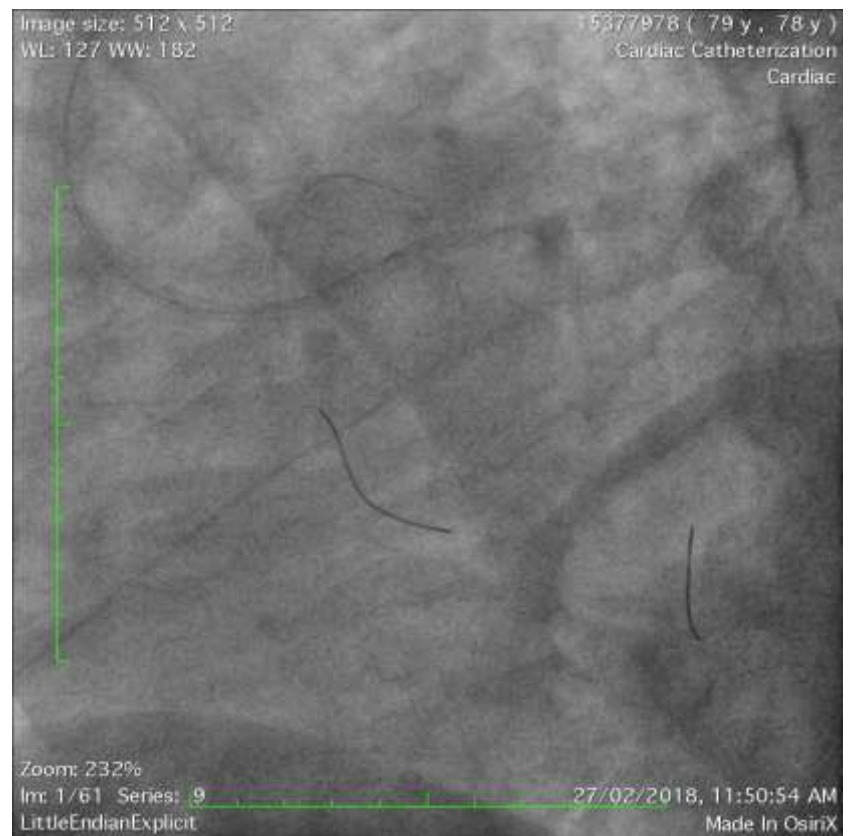
Wired LAD from outside carefully
Runthrough wire



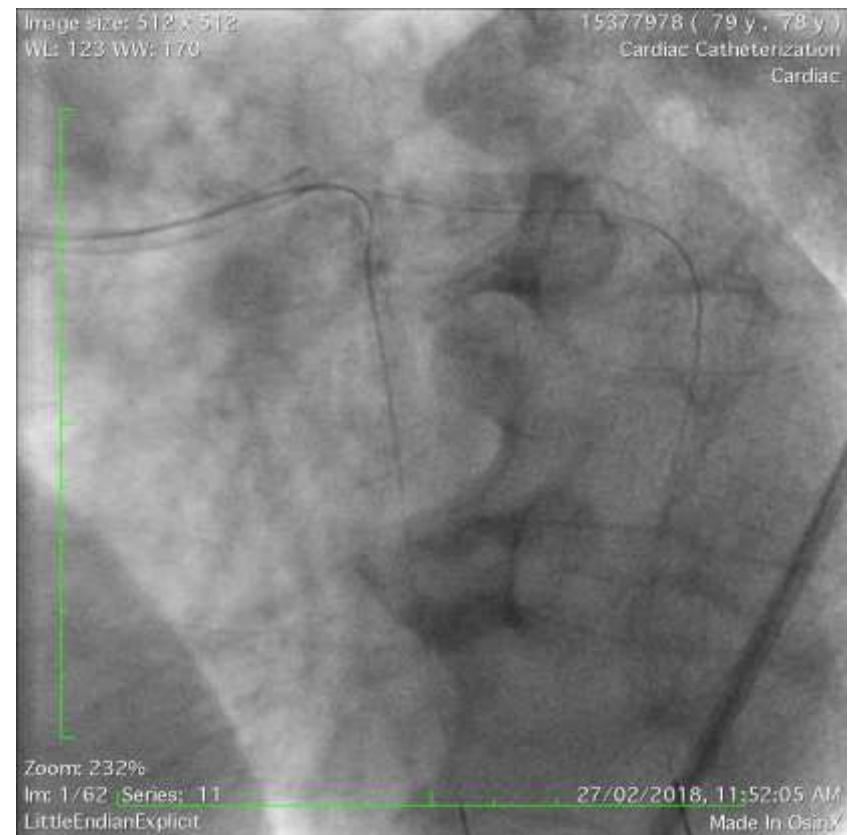
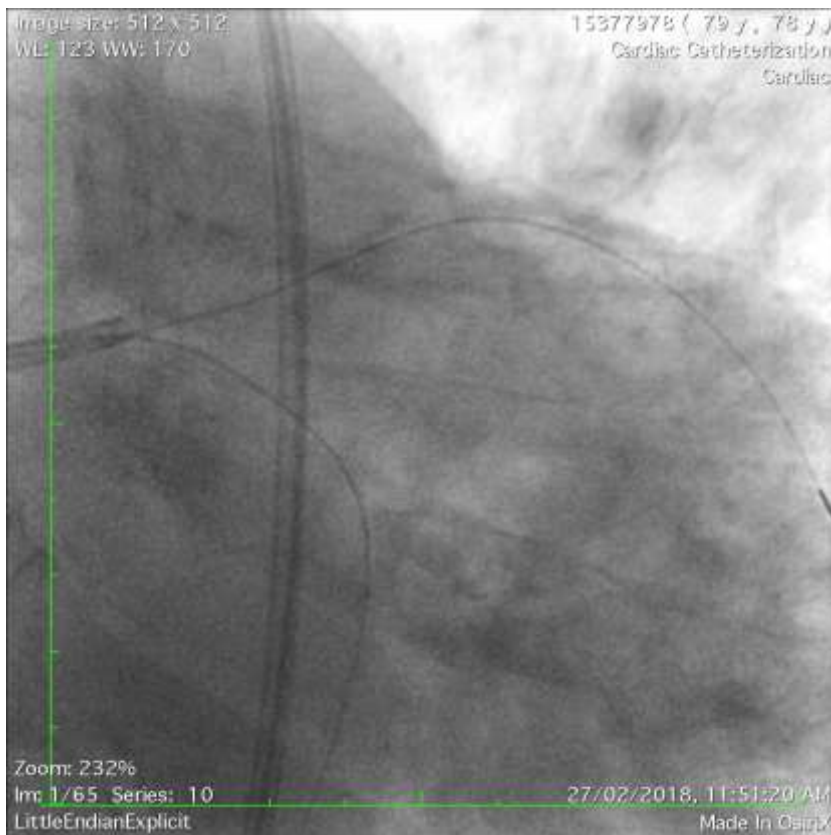
Wired LCX carefully from outside Runthrough wire



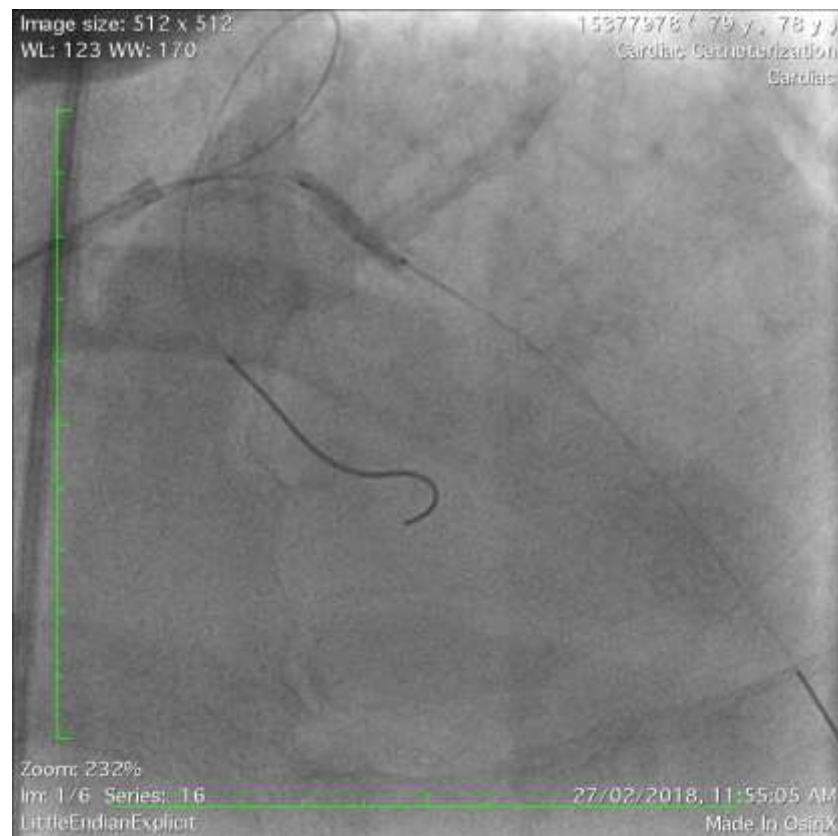
Slowly engage the catheter



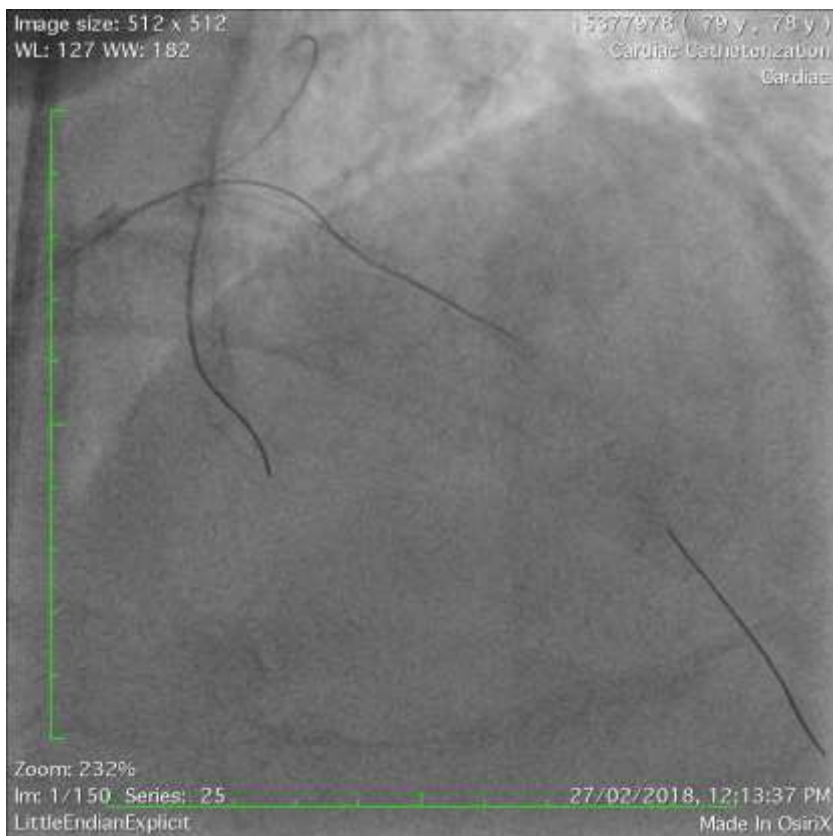
Heavy calcification



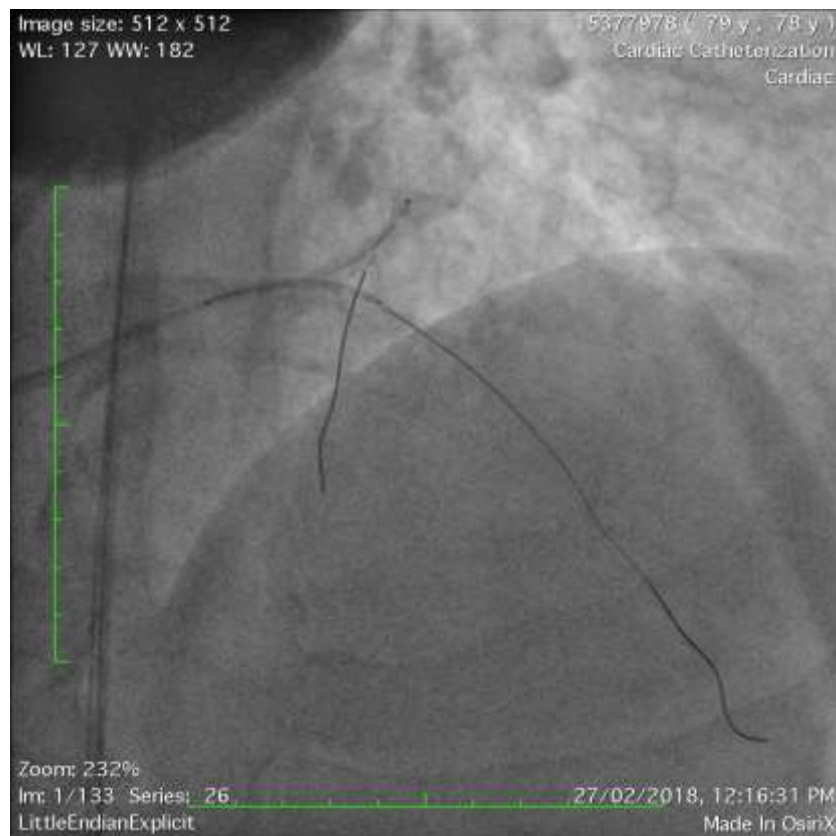
Scoreflex NC 2 x 15 mm NC Euphora 2.75 x 15 mm



Unable to pass the stent
Parallel wire Choice PT extra support



Able to pass the stent
Onyx 2.75 x 22





7F sheath inserted into right femoral artery (Entered By: UMMC, UMMC ICL Admin)
 Diagnostic Guide Wire inserted 0.035X150 JTIP (Entered By: UMMC, UMMC ICL Admin)
 Diagnostic Catheter inserted JR 3.5 6F (Entered By: UMMC, UMMC ICL Admin)
 Cardiac Angiography of RCA performed in multiple view (Entered By: UMMC, UMMC ICL Admin)
 Diagnostic Catheter removed (Entered By: UMMC, UMMC ICL Admin)
 Vessel: Left Anterior Descending Artery (Entered By: UMMC, UMMC ICL Admin)
 Guide Catheter intubated XBLAD 3.5 7F SH Cordis (Entered By: UMMC, UMMC ICL Admin)
 Guide Catheter exchanged XBLAD 4 7F SH Cordis (Entered By: UMMC, UMMC ICL Admin)
 Guide Wire inserted RUNTHROUGH to dLAD. (Entered By: UMMC, UMMC ICL Admin)
 Guide Wire inserted RUNTHROUGH to dLCx. (Entered By: UMMC, UMMC ICL Admin)
 Balloon inserted SCOREFLEX NC 2.0 X 15mm. (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 20 atm - 10 secs (pLAD). (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 20 atm - 10 secs (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 20 atm - 10 secs (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 24 atm - 10 secs (Entered By: UMMC, UMMC ICL Admin)
 Balloon withdrawn (Entered By: UMMC, UMMC ICL Admin)
 Balloon inserted NC EUPHORA 2.75 X 15mm. (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 14 atm - 10 secs (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 18 atm - 10 secs (Entered By: UMMC, UMMC ICL Admin)
 Balloon withdrawn (Entered By: UMMC, UMMC ICL Admin)
 Guide Wire inserted CHOICE PT EXTRA SUPPORT (Entered By: UMMC, UMMC ICL Admin)
 Stent inserted RESOLUTE ONYX 2.75 X 22mm. (Entered By: UMMC, UMMC ICL Admin)
 Stent deployed @ 18 atm - 15 secs (pLAD). (Entered By: UMMC, UMMC ICL Admin)
 Stent balloon reinflated @ 18 atm - 10 secs (Entered By: UMMC, UMMC ICL Admin)
 Stent balloon reinflated @ 18 atm - 07 secs (Entered By: UMMC, UMMC ICL Admin)
 Stent withdrawn (Entered By: UMMC, UMMC ICL Admin)
VOLCANO IVUS catheter advanced to LAD. (Entered By: UMMC, UMMC ICL Admin)
 Balloon inserted NC HAWK 3.0 X 15mm. (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 18 atm - 05 secs (post dilate). (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 20 atm - 10 secs (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 20 atm - 05 secs (Entered By: UMMC, UMMC ICL Admin)
 Balloon withdrawn (Entered By: UMMC, UMMC ICL Admin)
 VOLCANO IVUS catheter advanced to LCx. (Entered By: UMMC, UMMC ICL Admin)
 Balloon inserted ACCUFORCE 3.5 X 8mm. (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 18 atm - 10 secs (post dilate). (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 18 atm - 10 secs (Entered By: UMMC, UMMC ICL Admin)
 Balloon withdrawn (Entered By: UMMC, UMMC ICL Admin)
 Balloon inserted HAWK 2.0 X 15mm. (Entered By: UMMC, UMMC ICL Admin)
 Balloon withdrawn (Entered By: UMMC, UMMC ICL Admin)
 Balloon inserted SAPPHIRE 1.0 X 15mm. (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 16 atm - 10 secs (pLCx). (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 16 atm - 10 secs (Entered By: UMMC, UMMC ICL Admin)
 Balloon withdrawn (Entered By: UMMC, UMMC ICL Admin)
 Balloon inserted HAWK 2.0 X 15mm. (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 10 atm - 10 secs (pLCx). (Entered By: UMMC, UMMC ICL Admin)
 Balloon inflated @ 10 atm - 10 secs (Entered By: UMMC, UMMC ICL Admin)
 VOLCANO IVUS catheter advanced to LCx.. (Entered By: UMMC, UMMC ICL Admin)
 Stent inserted RESOLUTE ONYX 2.0 X 15mm. (Entered By: UMMC, UMMC ICL Admin)
 Stent deployed @ 18 atm - 10 secs (pLCx). (Entered By: UMMC, UMMC ICL Admin)

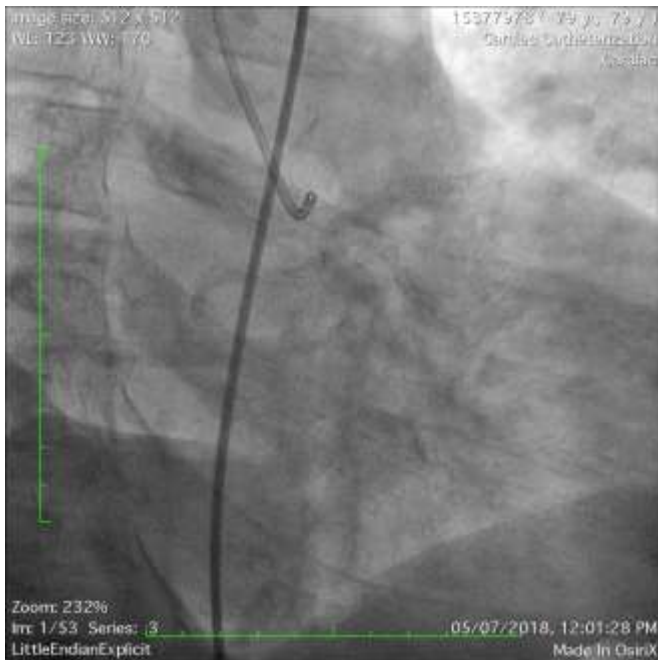
Un-dilatable Coronary Lesions

- Calcified or highly fibrotic lesions or both that cannot be dilated by conventional balloons.
- Seen in 10% of patients and very common in dialysis patients.
- Under-estimated the **highly fibrotic lesion** rather than purely calcified.
- Best diagnosed by virtual histology on imaging



- ? Associated with the prostate treatment
- Aim for procedural success without complications.
- Scoring/cutting balloon or even rotablation
- Rotablation has its own complications esp low flow in this case leading to acute ischemic and possible collapse.

NSTEMI 5.7.18



Balloon inserted TREK 3.0X15 (Entered By: ummc, .)
Balloon inflated @ 12 atm - 11 secs (Entered By: ummc, .)
Balloon inflated @ 14 atm - 10 secs (Entered By: ummc, .)
Stent inserted XIENCE XPEDITION 3.0X23 (Entered By: ummc, .)
Stent deployed @ 12 atm - 23 secs pLAD (Entered By: ummc, .)
Balloon inserted NC TREK 3.25X8 (Entered By: ummc, .)
Balloon inflated @ 12 atm - 10 secs (Entered By: ummc, .)
Balloon inflated @ 16 atm - 13 secs (Entered By: ummc, .)
Balloon inflated @ 18 atm - 12 secs (Entered By: ummc, .)
Procedure complete (Entered By: ummc, .)

