

Real World Evidence of Lutonix : **My practice with Lutonix DCB**

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DCB: Basics and Complement



1. PRE-DILATATION

- Required for all lesions prior to DCB procedure
- Size - Diameter: 1 mm less than RVD
- Size - Length: should not be greater than planned DCB length

For adequate drug delivery, predilation or lesion preparation might be most important! Plaque burden is excessive and may limit stent expansion and effective drug delivery.

Especially, high likelihood from suboptimal simple PTA results, such as long, total occlusion and calcification...

We need more things to do...

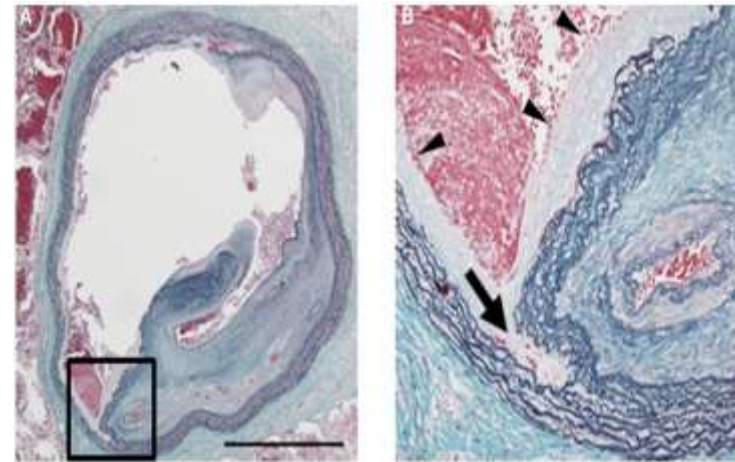


- For persistent residual stenosis \geq 50% or new limiting dissection
- Minimum length as necessary to fully treat the residual stenosis or dissection

Successful Balloon Angioplasty

Mechanism of Action

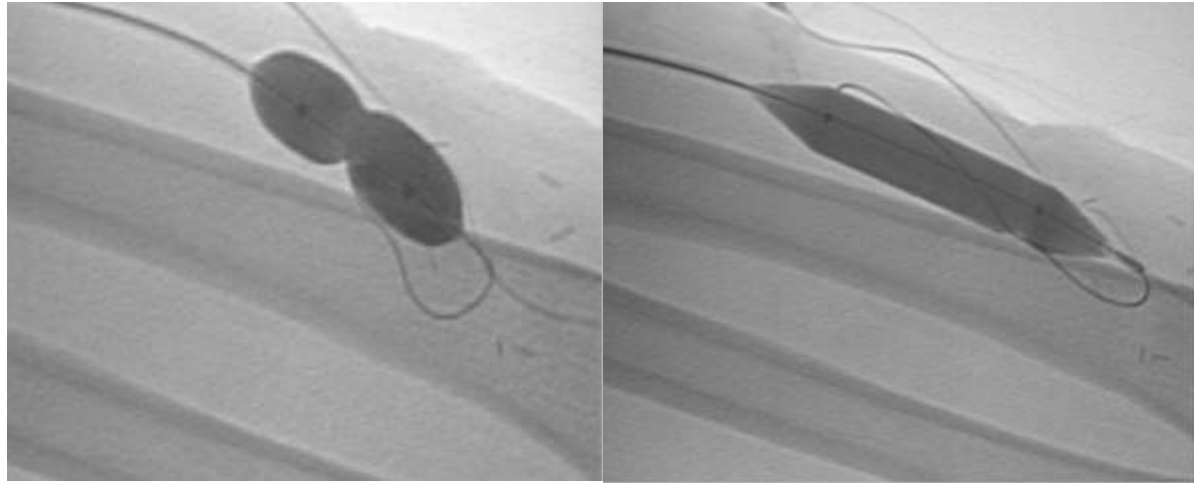
- Produces complete endothelial denudation in the dilated area with regrowth of the endothelial cells by 7 days
- Creates a tear that extended through the internal elastic lamina and into the media often followed by necrosis of the smooth muscle cells and damage to the normal architecture of the elastic fibers
- **The tear or fracture of the intimal plaque and adjoining media is usually necessary for a successful procedure.**

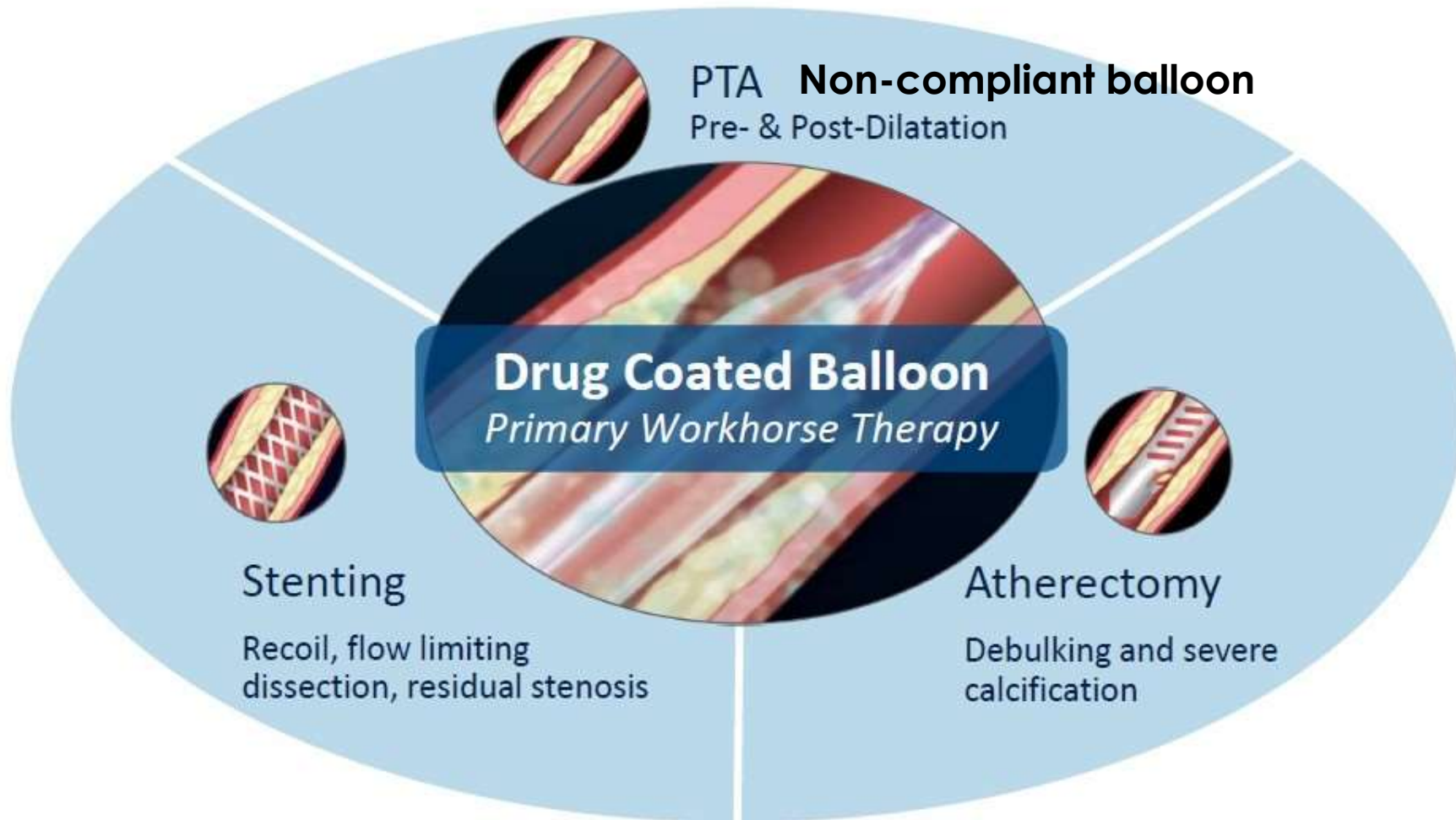


PTA: Utility...

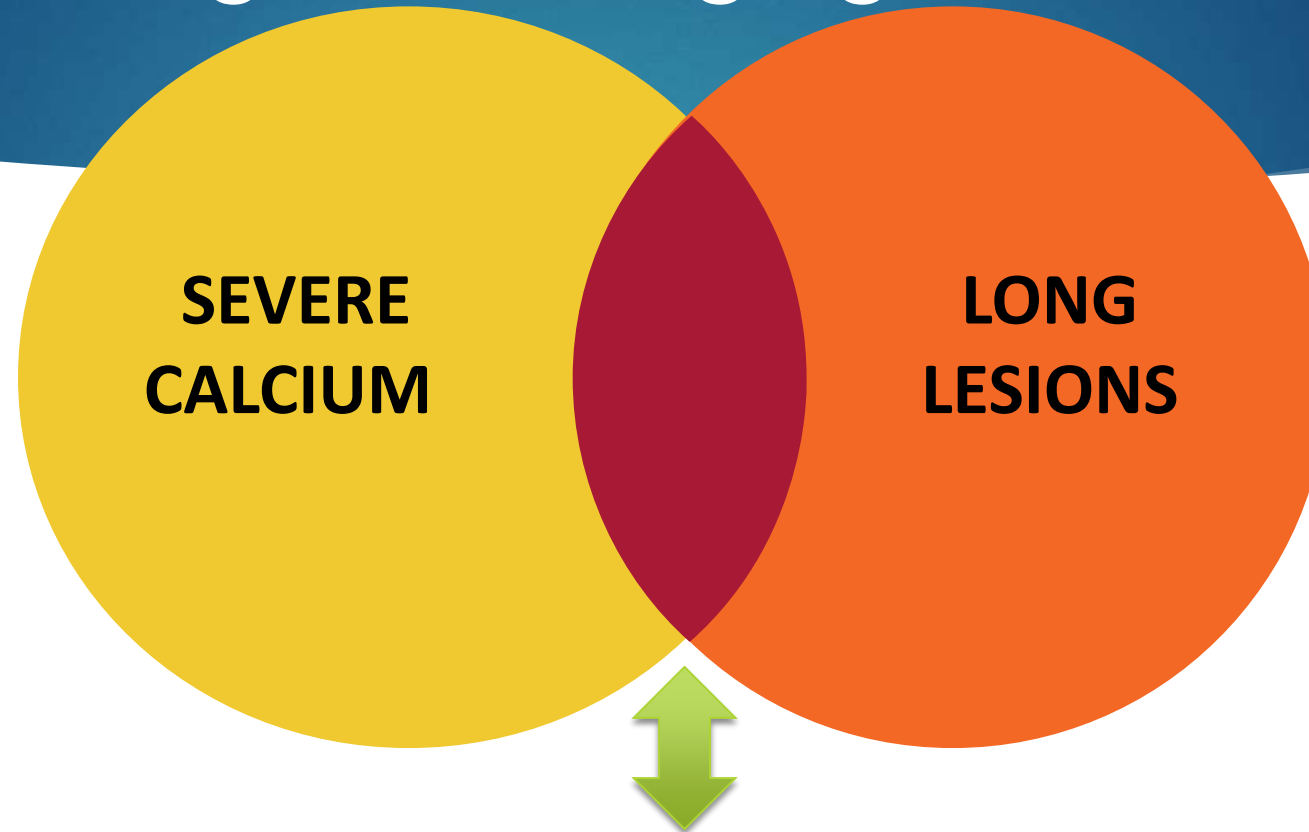
- Small profile
- **High pressure**
- Caged / Constrained
- Scoring
- Cutting

Non-compliant balloons concentrate maximum dilatation force at the resistant lesion allowing for inflation without the risk of overexpansion.





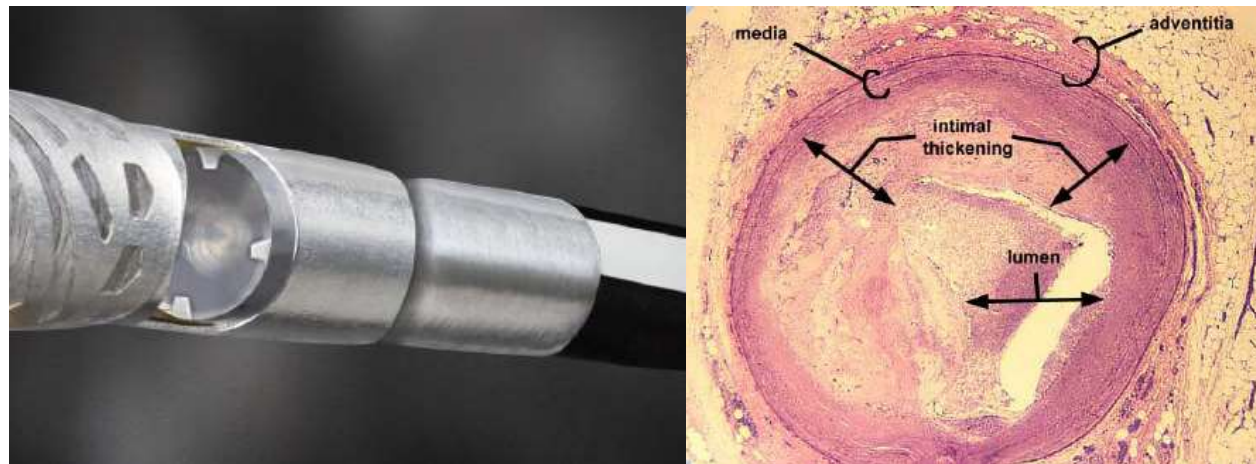
Defining 'Challenging' SFA Lesions



**DAART= Directional Atherectomy + Anti-Restenotic Therapy:
An Emerging Paradigm**

DAART = Directional Atherectomy + Anti-Restenotic Therapy

- ▶ Mechanically re-canalize the vessel without overstretch
- ▶ Remove perfusion barrier (improve penetration of drug into the media/adventitia)
- ▶ Reduce the likelihood of bail-out stenting and preserve the native vessel



Case 1.



Case 1

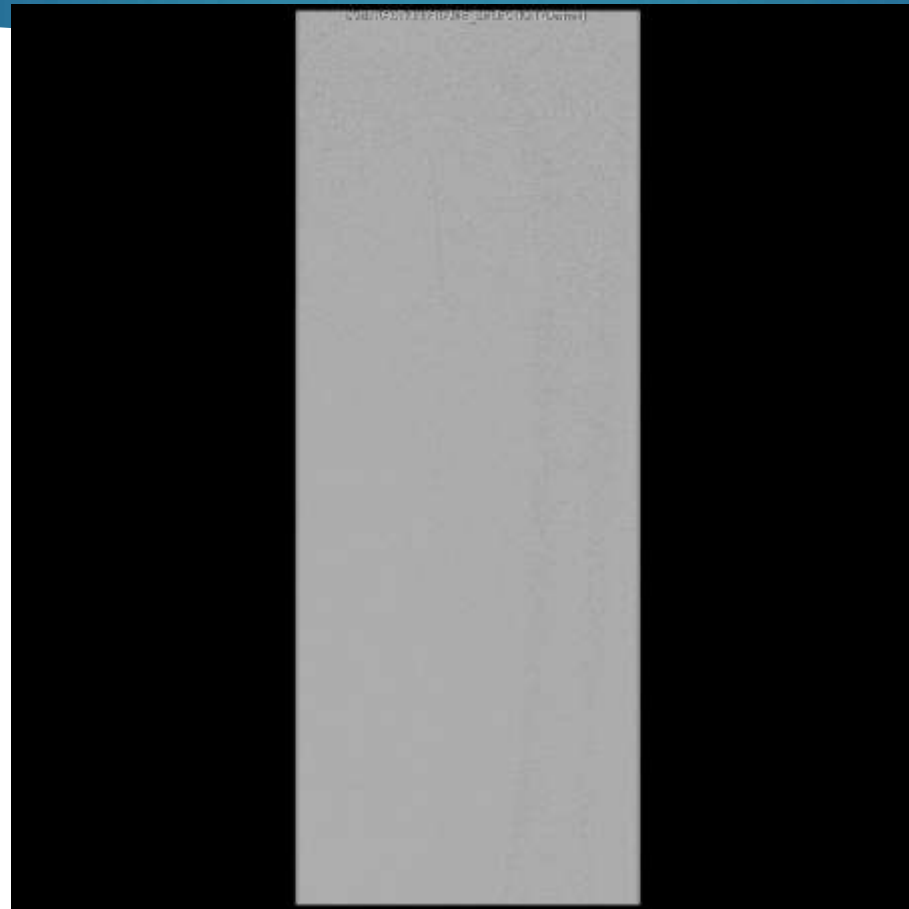


0.014 inch + CXI

Conventional balloon

Lutonix #3

Case 1 : final angiogram



Case 2



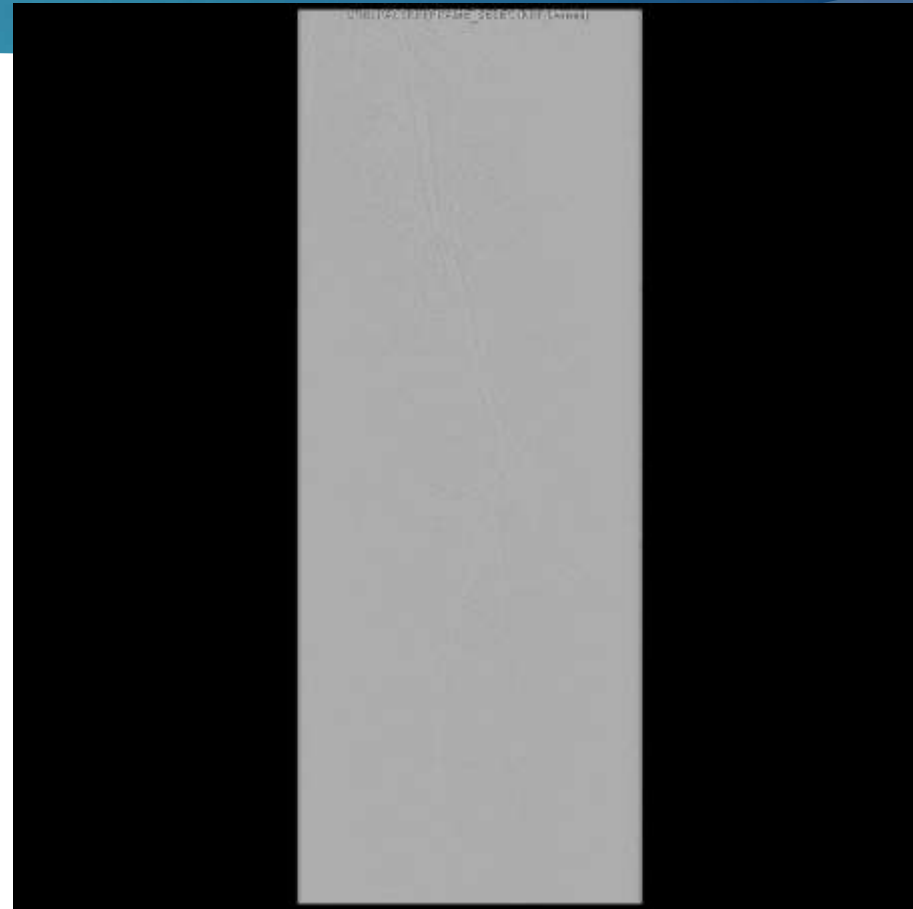
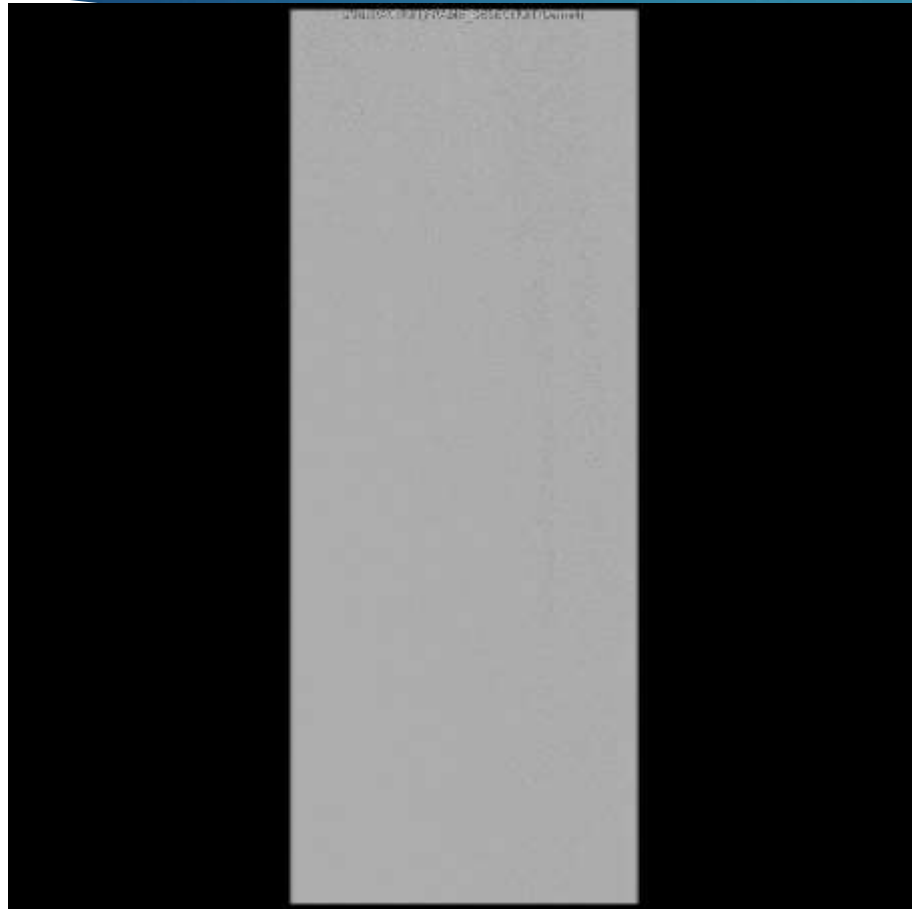
Case 2



0.014 inch + NC balloon

Lutonix #2

Case 2: final angiogram



Case 3



Case 3

SUBTRACTION;FRAME_SELECTION (Derived)



0.014 inch via pedal loop
ATA to T-P trunk

Case 3. final angiogram



NC balloon

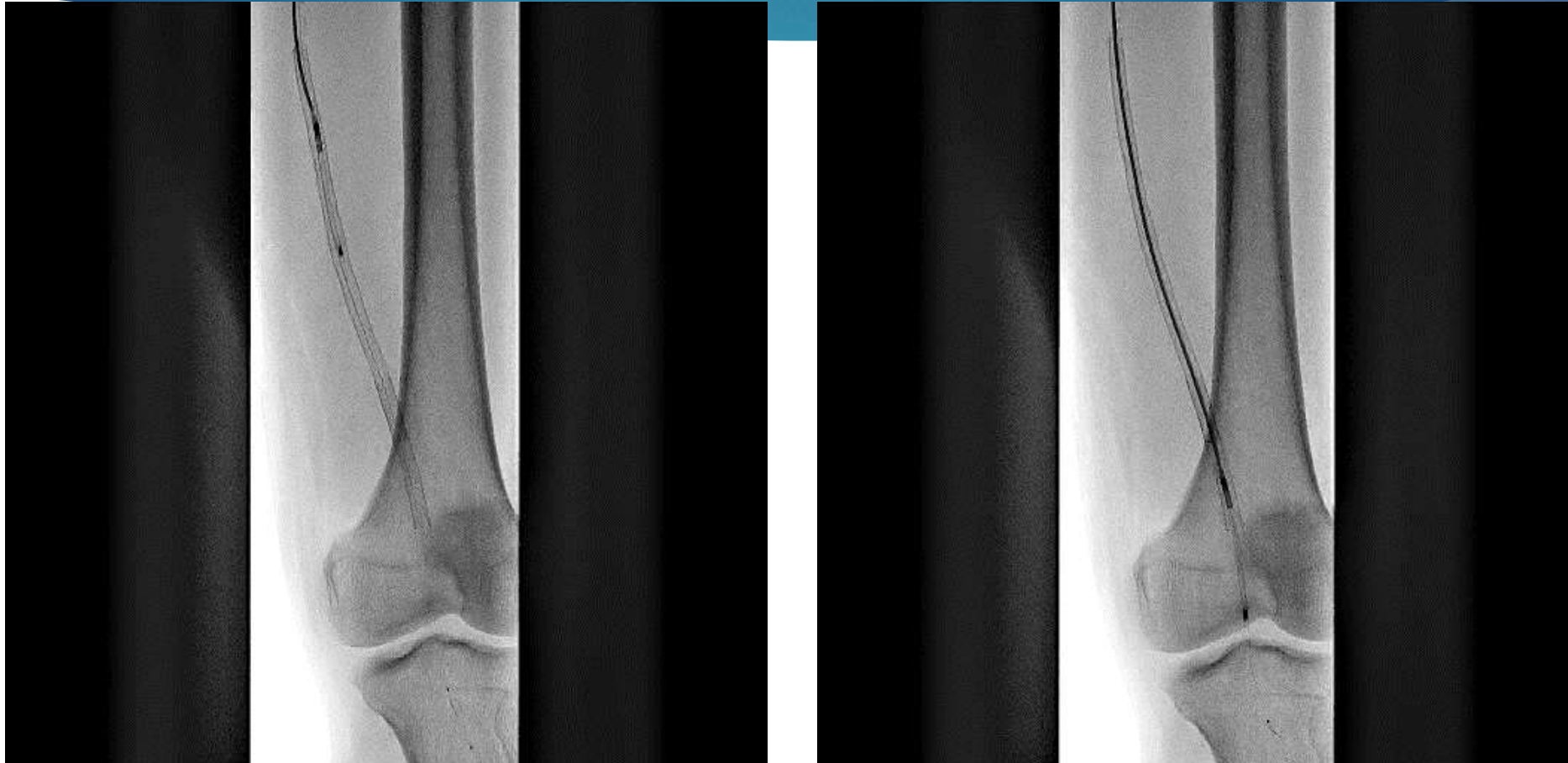
Lutonix #2

Case 4 ISR, stent at 2-years ago



Distal filter

Case 4 ISR, stent at 2-years ago



Case 4 ISR, stent at 2-years ago

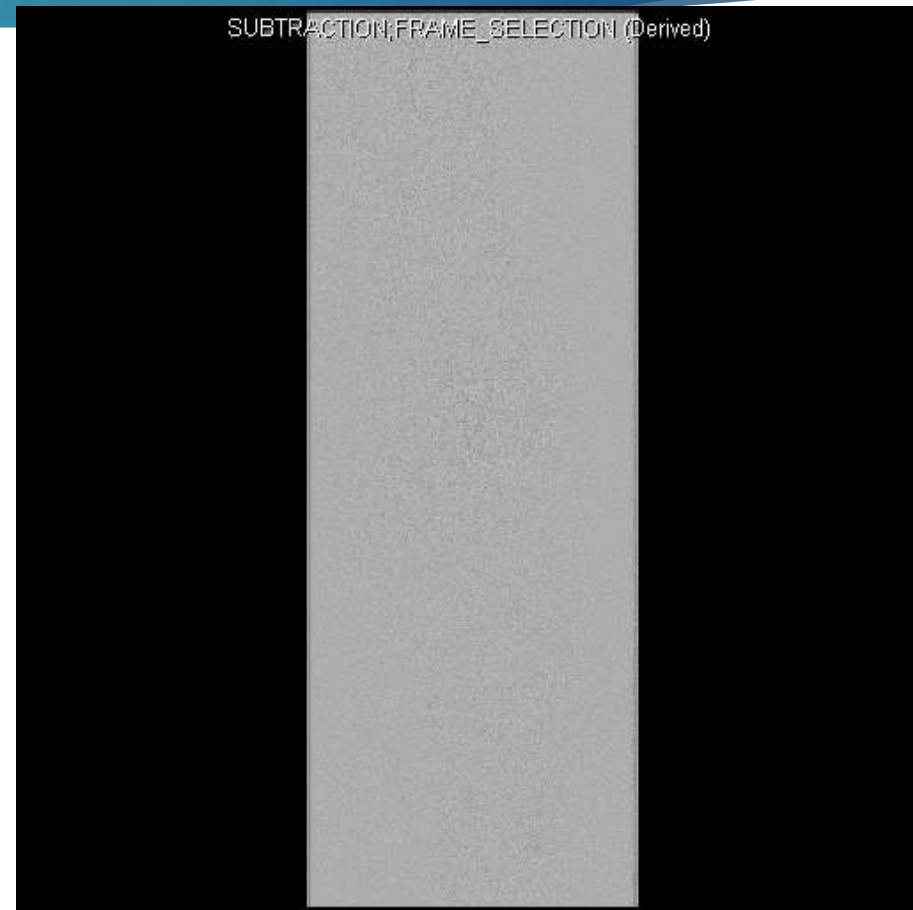
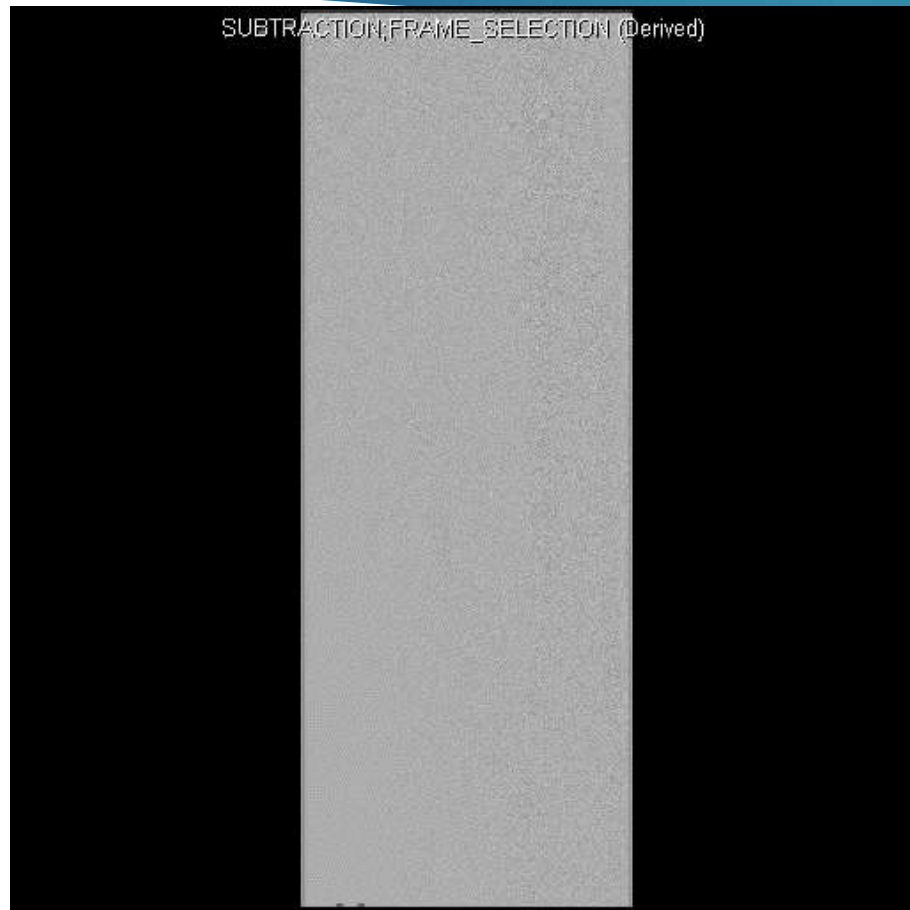


NC balloon



Lutonix #2

Case 4 ISR, final angiogram

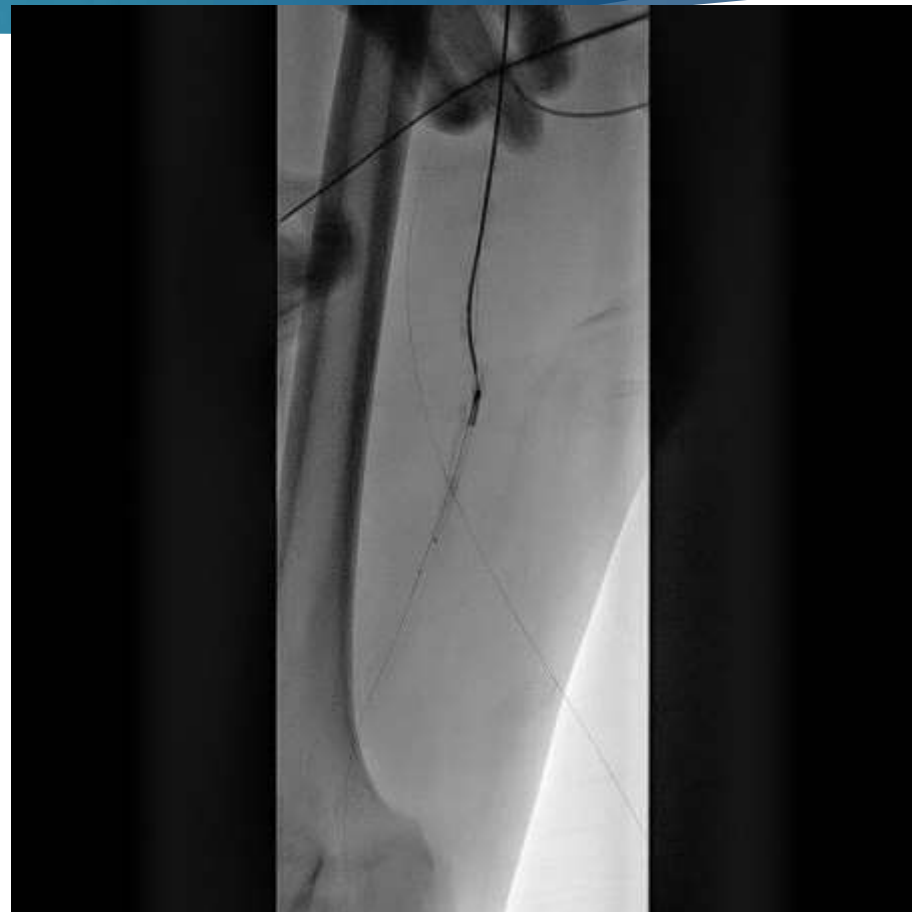


Case 5



Filter

Case 5



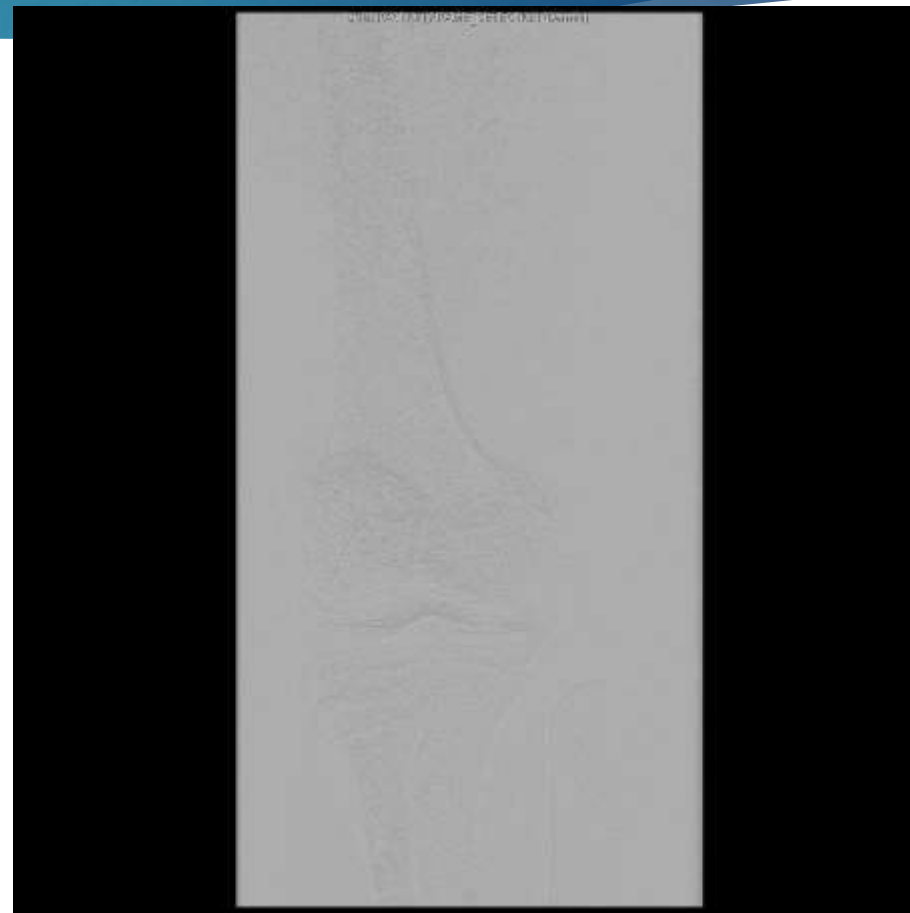
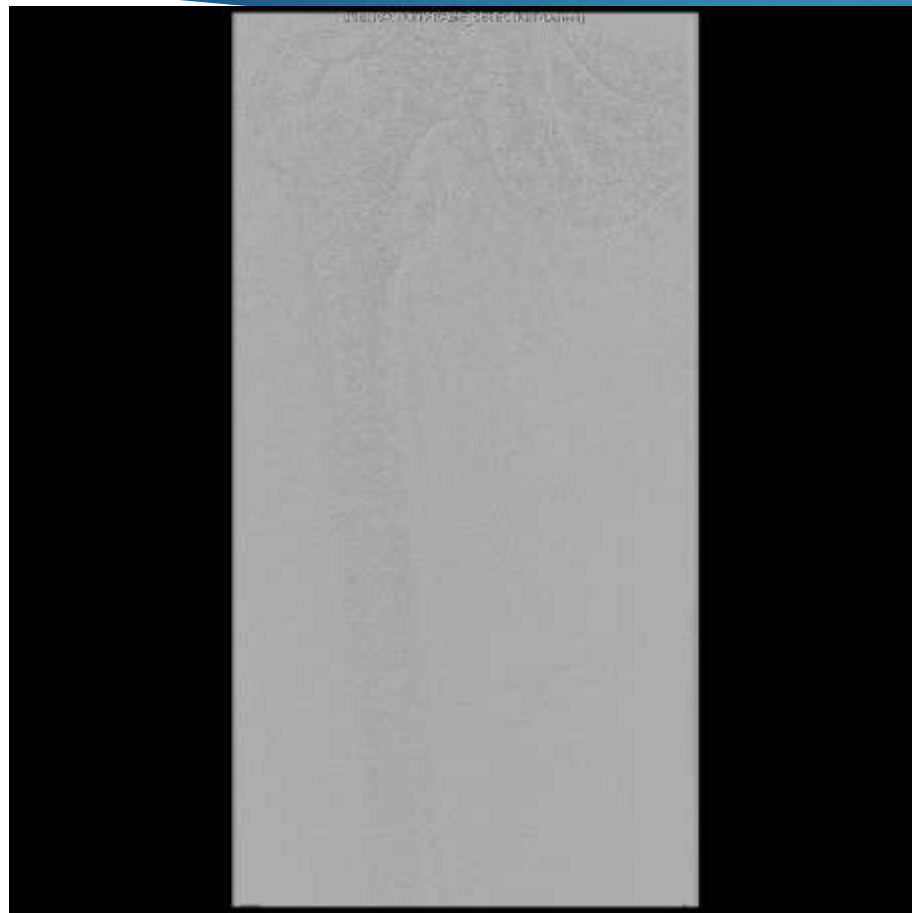
Case 5



NC balloon

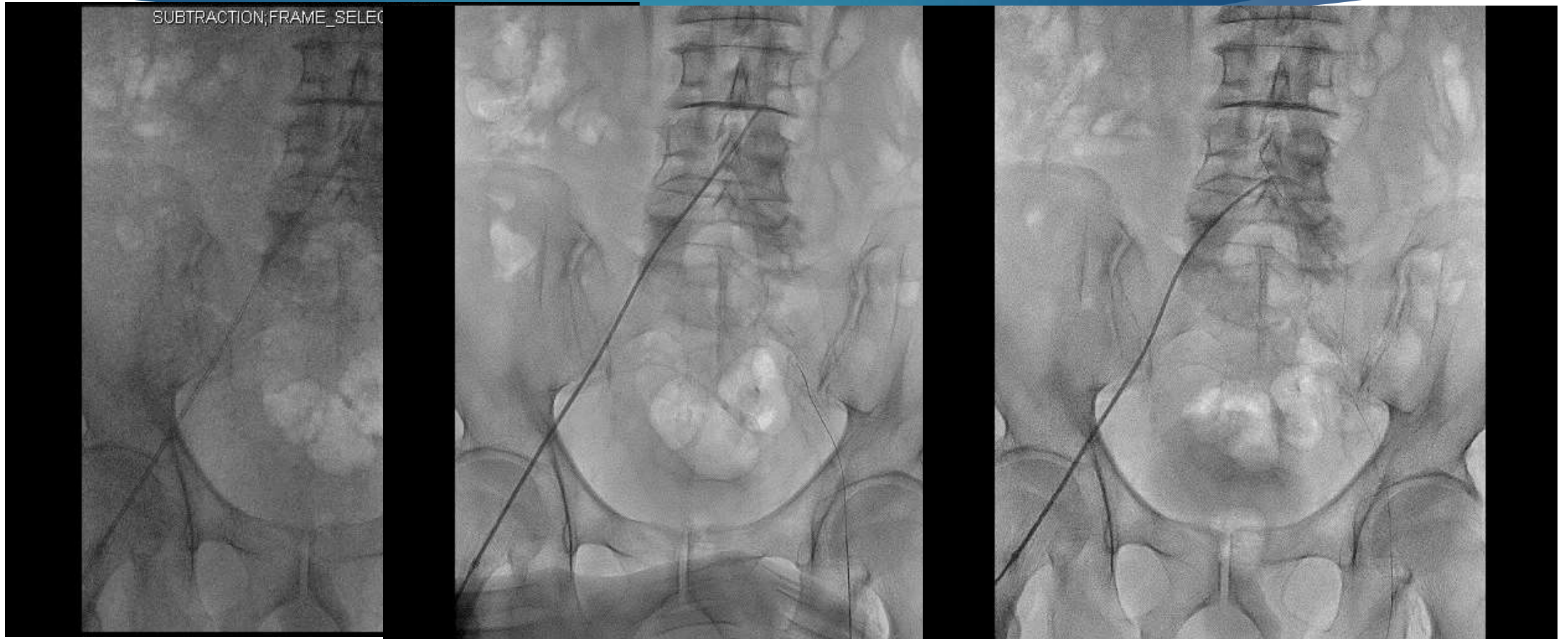
Lutonix #3

Case 5. final angiogram

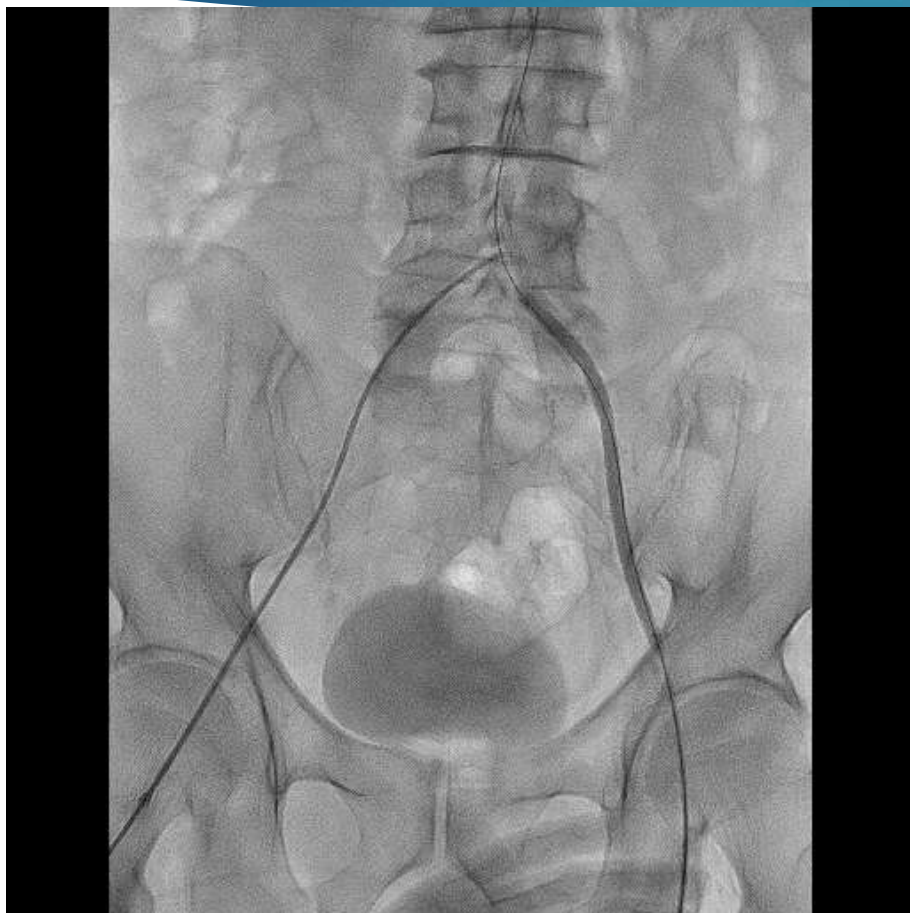


Case 6

Rt. CIA stenosis, Lt. EIA total



Case 6



Case 6, using cross-over technique



Case 6



Subintimal wiring

Distal SFA puncture

Wire externalization
Jet Stream

Case 6



NC balloon



Lutonix #3

Case 6

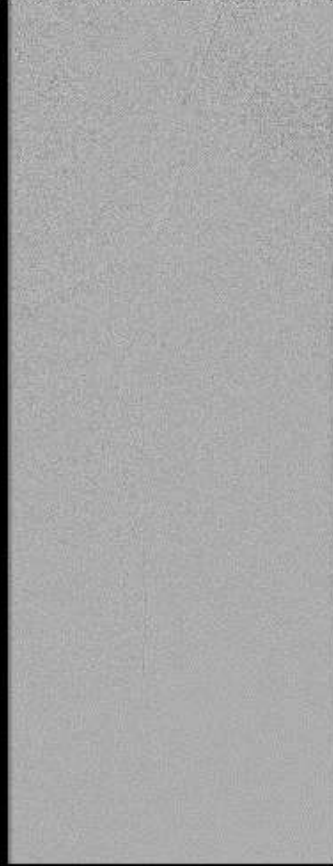
Vessel damage

SUBTRACTION;FRAME_SELECTION (Derived)



Stent deployment

SUBTRACTION;FRAME_SELECTION (Derived)



SUBTRACTION;FRAME_SELECTION (Derived)



My practice with Lutonix DCB

- ▶ If possible, first wiring with 0.014 inch wire (true lumen tracking), sometimes, using IVUS
- ▶ After wiring, small ballooning (2.0 ~2.5 mm sized) and conventional ballooning
- ▶ If needed, vessel preparation using NC balloon or atherectomy, especially in long, chronic total occlusion, calcification or ISR
- ▶ Lower residual stenosis with longer Lutonix ballooning time (at least 3 minutes)



Thank you for your attention