RAMSAY GÉNÉRALE DE SANTÉ

Nous prenons soin de vous

HÔPITAL PRIVÉ
PARLY II - LE CHESNAY

Long FP lesions with re-entery / retrograde approach

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Groupe hospitalier
Paris Saint-Joseph

FEMORO POPLITEAL ARTERY RECANALIZATION

Endoluminal → Obstructions < 10 cm non-calcific

Subintimal →

- Obstruction > 10 cm
- Endoluminal failure
- Calcifications

SUBINTIMAL ANGIOPLASTY FEM - POP

UNFEASIBILITY RATE

1. YILMAZ S	12%
2. SMITH BM	18% CLI
3. OSTRI CH	11%
4. SPINOSA DJ	14%
5. TREIMAN GS	10%

1. Yılmaz SJ, Vasc Interv Radiol 2003; 2. Smith BM, Ann R Coll Surg Engl. 2005 Sep; 3. Ostri CH, Ugeskr Laeger. 2006 Mar; 4. Spinosa DJ, Radiology 2004 Aug; ; 5. Treiman GS, J Vasc Surg. 2006 Mar

Failure causes of an antegrade recanalization are different in function of the site:

1.Proximal reasons

a. Non detectable origin

b. Occlusion origins with collaterals and no stump

2. Intermediate reasons

a. Vessel Rupture

b. No progression of the recanalization devices

3. Distal reasons

Impossible re-entery

1. Failure causes of an antegrade recanalization due to a proximal reason

a. Non detectable origin

In this situation we can only use the double approach technique

b. Occlusion origins with collaterals and no stump

In this situation we can only use the double approach technique

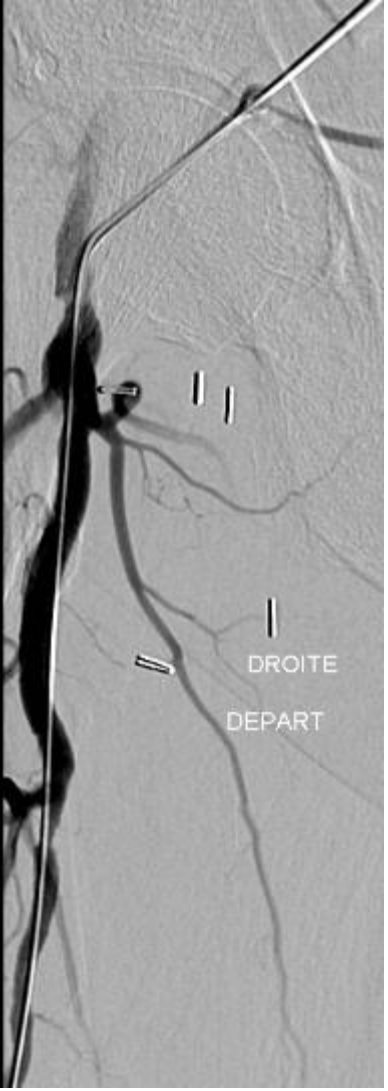
Recanalization of FEM POP CTO

Double Approach

Primary success rate: 55/56 98,2 %

The double approach technique is safe and feasible with a very high success rate, if performed by trained operators.

Noory E et al. J Endovasc Ther 2009;16:619-623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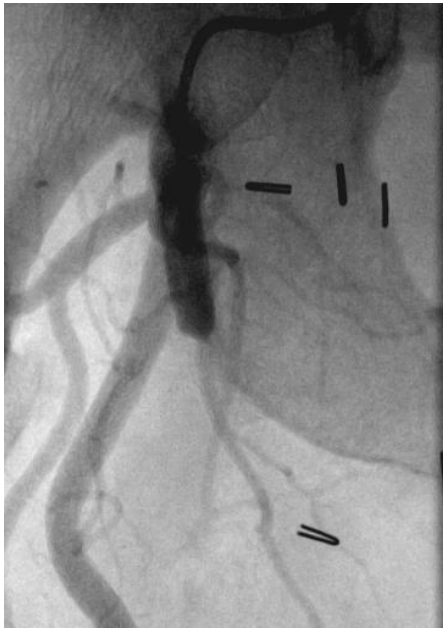


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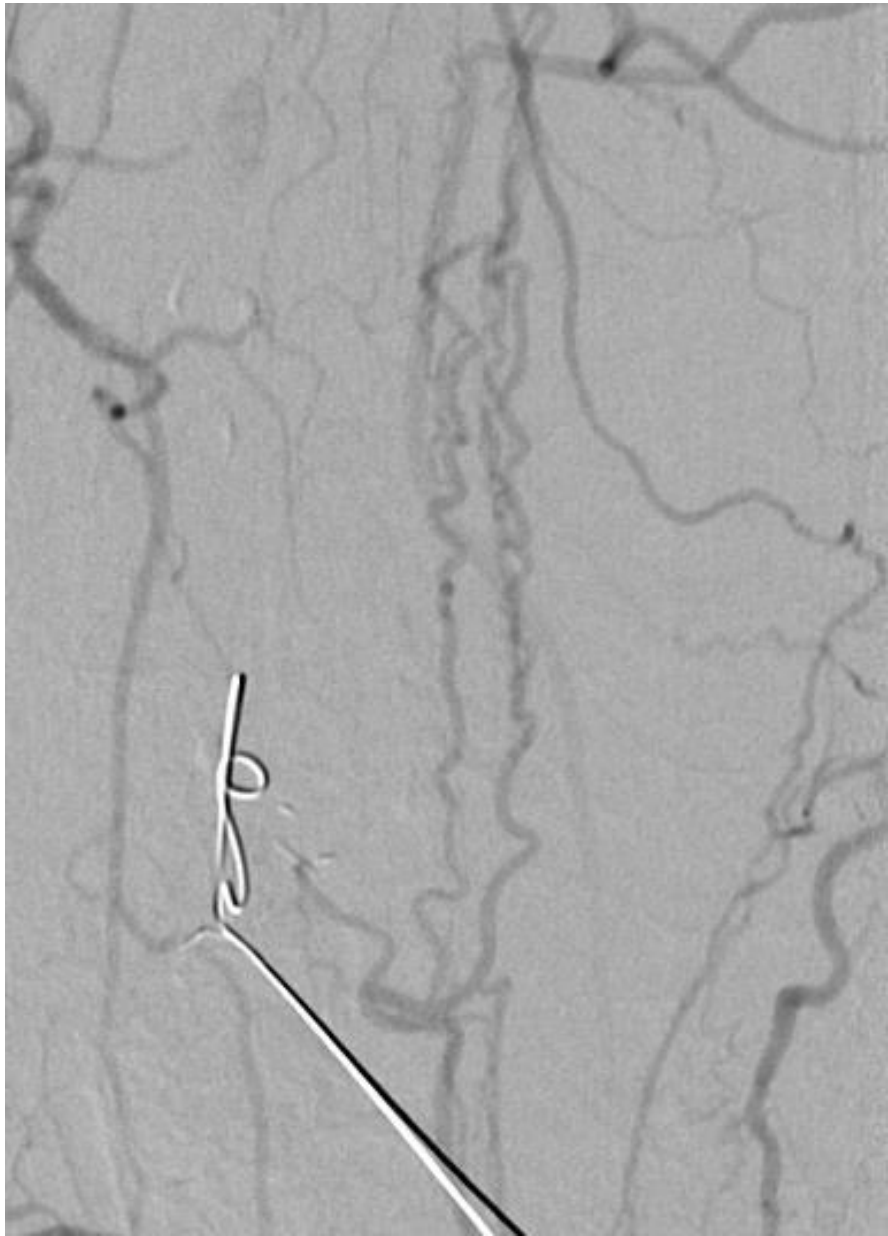

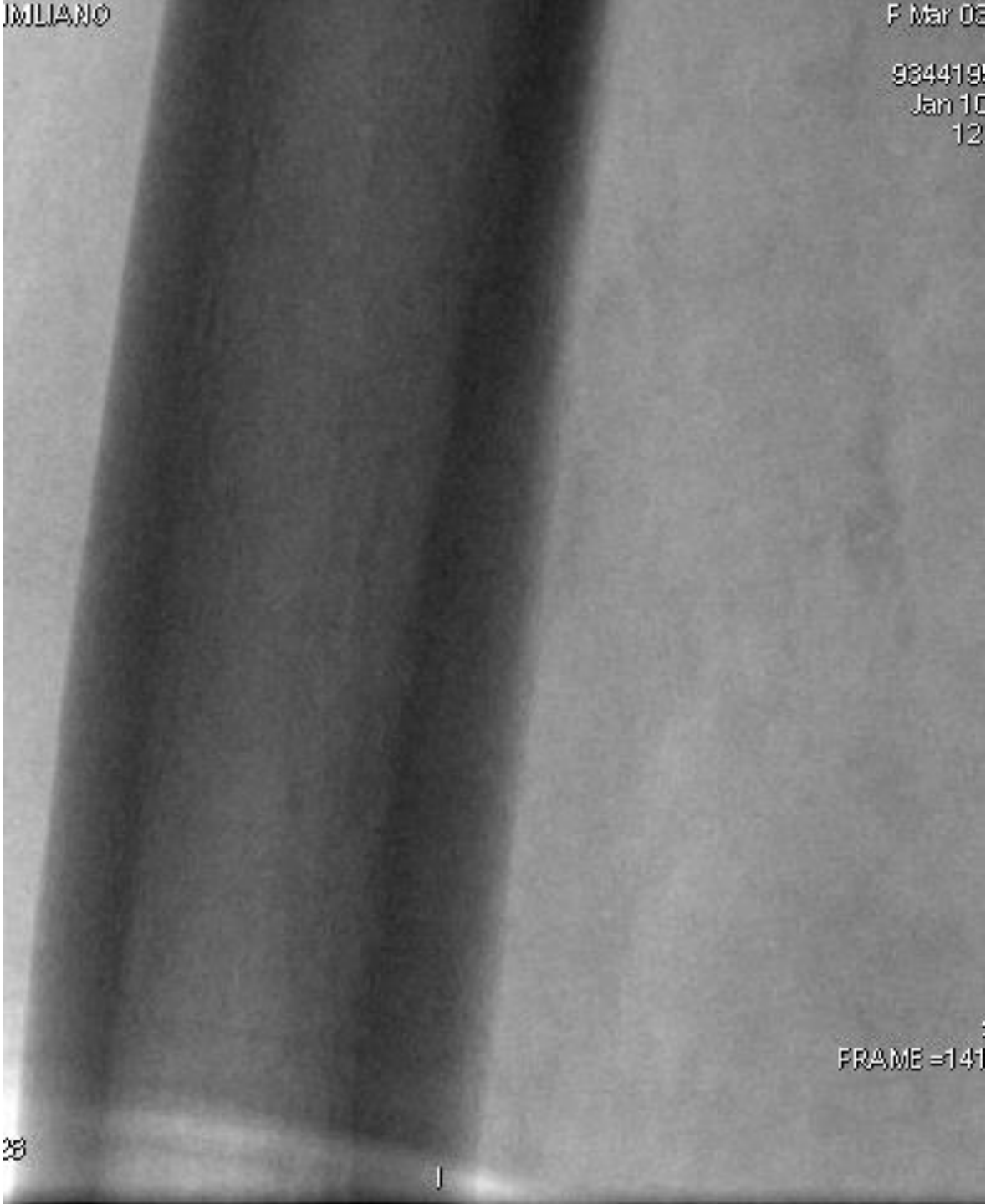
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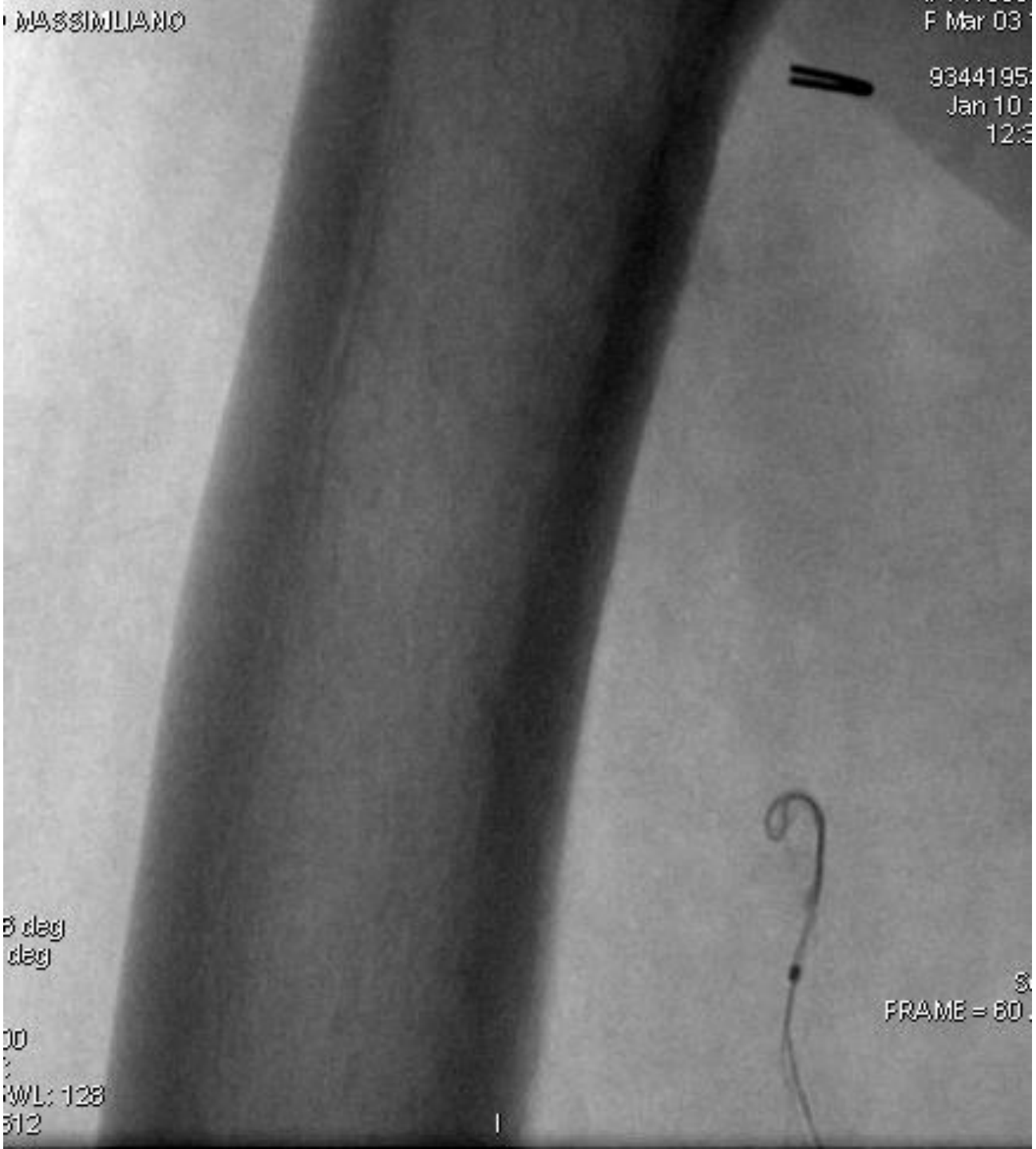
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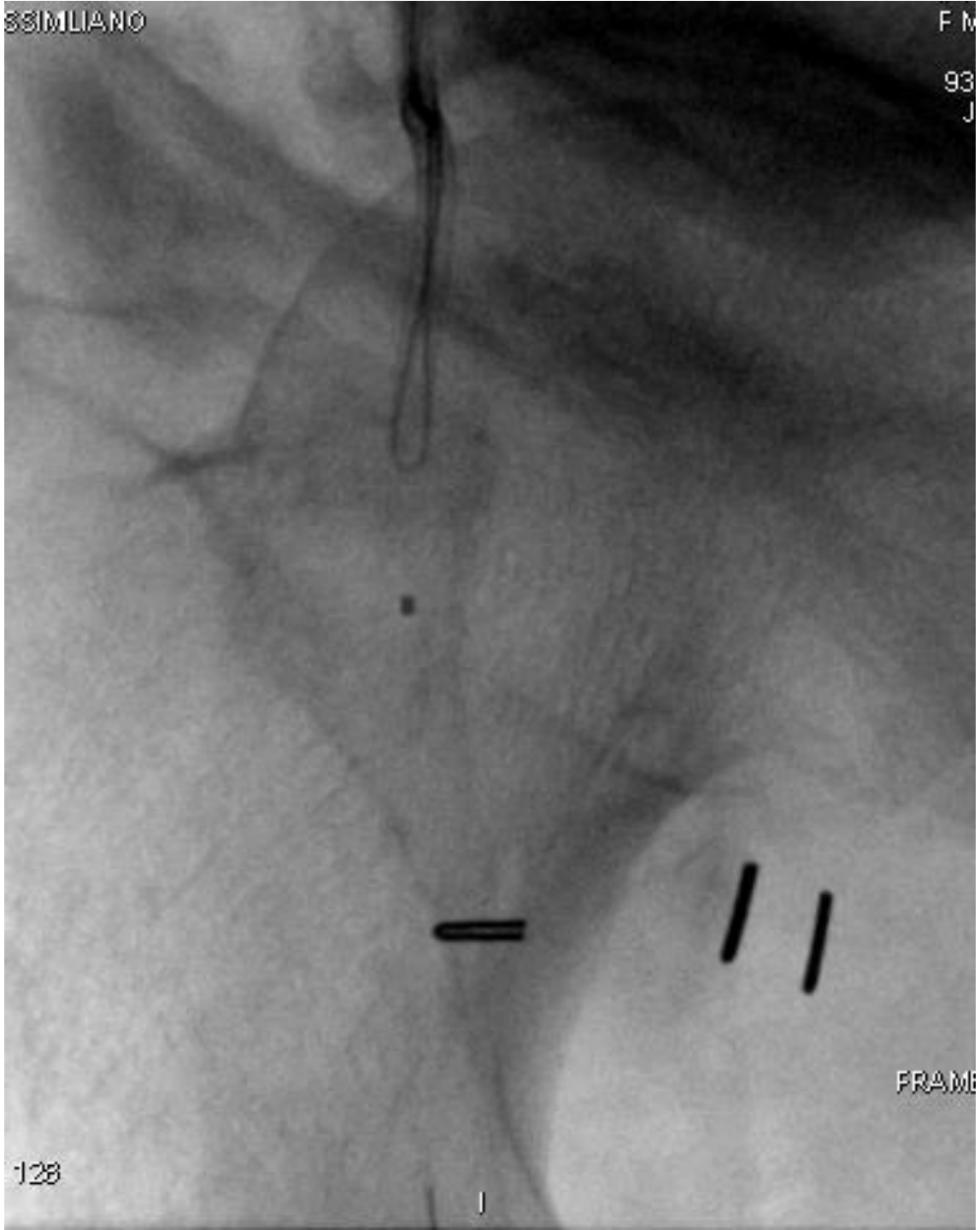
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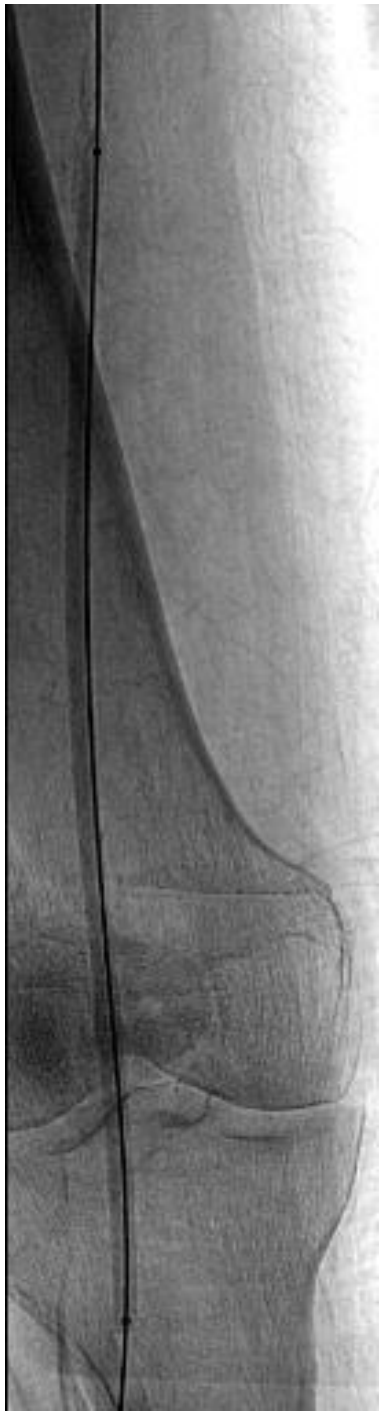


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Failure causes of an antegrade recanalization are different in function of the site:

1.Proximal reasons

a. Non detectable origin

b. Occlusion origins with collaterals and no stump

2. Intermediate reasons

a. Vessel Rupture

b. No progression of the recanalizarion devices

3. Distal reasons

Impossible re-entery

2. Failure causes of an antegrade recanalization: intermediate reason

a. Vessel Rupture

- First indication is → perform a **double approach**

- Use **re-entery** catheters to perform an extra vascular road → cost +++ (covered stent + device)

2. Failure causes of an antegrade recanalization: intermediate reason

b. No progression of the recanalizarion devices

Need to have in the arsenal of materials recanalization catheters, high support balloons, very low profile devices (0,014 ’’)

If failure → DOUBLE APPROACH

Failure causes of an antegrade recanalization are different in function of the site:

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2. Intermediate reasons

a. Vessel Rupture

b. No progression of the recanalizarion devices

3. Distal reasons

Impossible re-entery

3. Failure causes of an antegrade recanalization: distal reason

Impossible re-entery

THE KEY POINT IS TO CROSS THE OCCLUSION

RE-ENTRY

- DOUBLE APPROACH
- ASSISTED RE-ENTRY
  - OUTBACK (CORDIS)
  - PIONEER (VOLCANO)
  - OffRoad (Boston Scientific)

Recanalization of FEM POP CTO

OUTBACK REENTERY SYSTEM

3 large mono center papers published

Technical Success

- Study 1: 57/65 (88%)
- Study 2: 49/51 (96%)
- Stydy 3: 108/119 (91,5%)

Is it suitable to use the device in an antegrade approach and pre dilate the subintimal space before introducing the OUTBACK catheter

Beschorner U, et al. Cath Cardiovasc Intervent 2009, 74:934-938
Alsam et al. Cath Cardiovasc Intervent 2010 sept 7
Bausback et al. JEVT 2011


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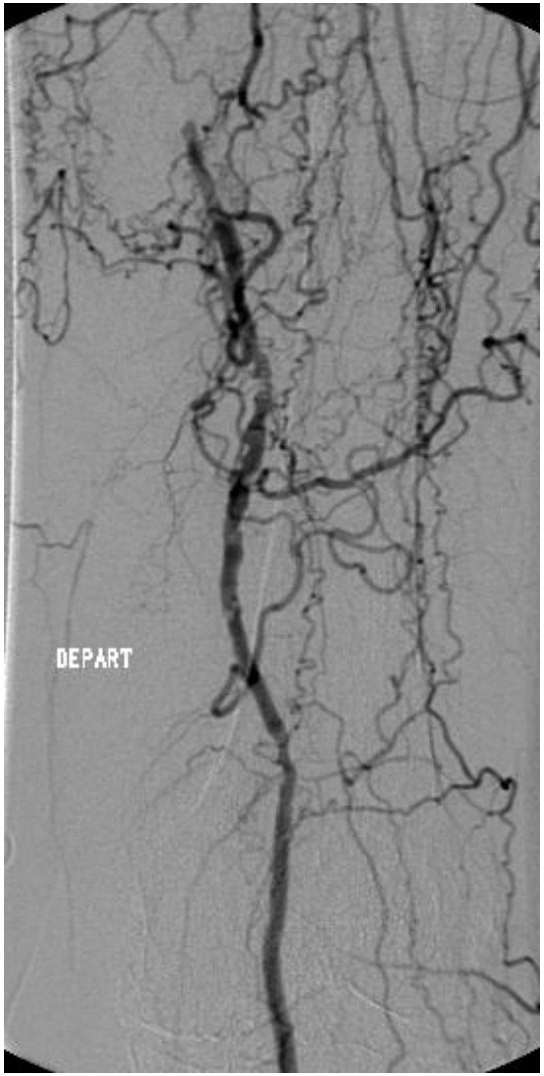
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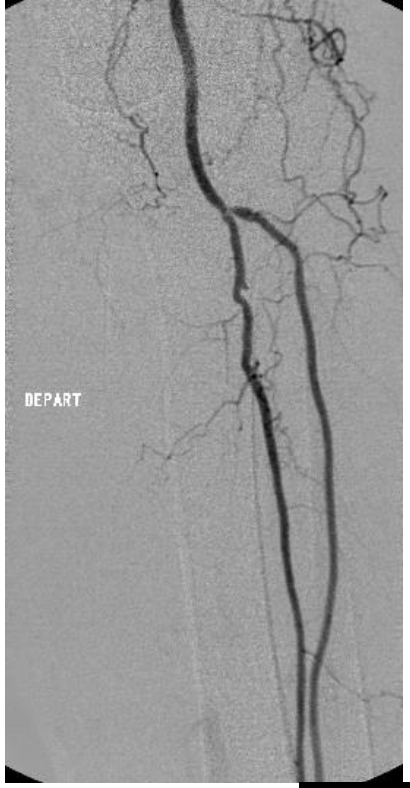
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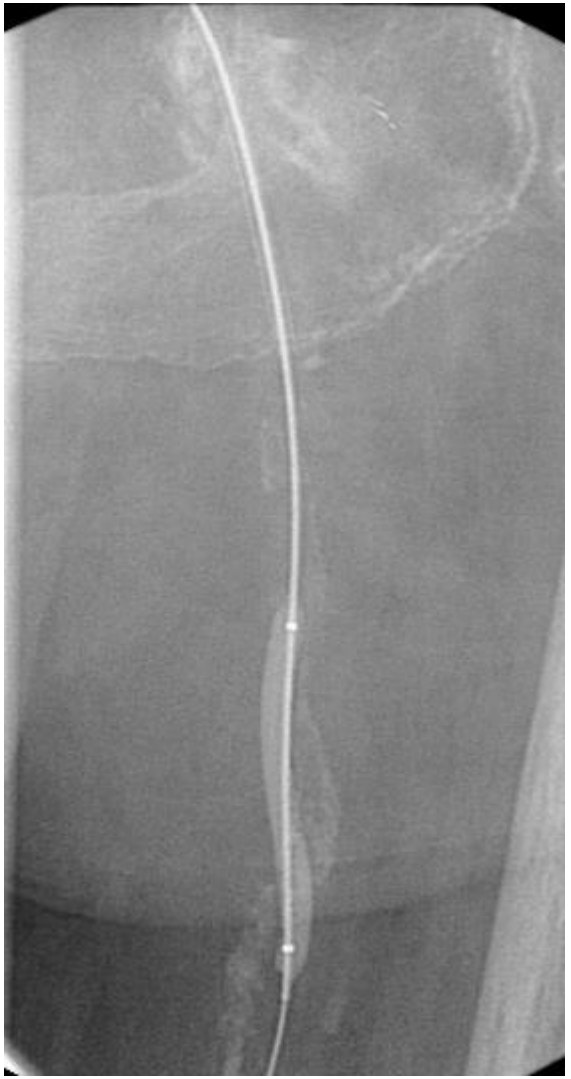

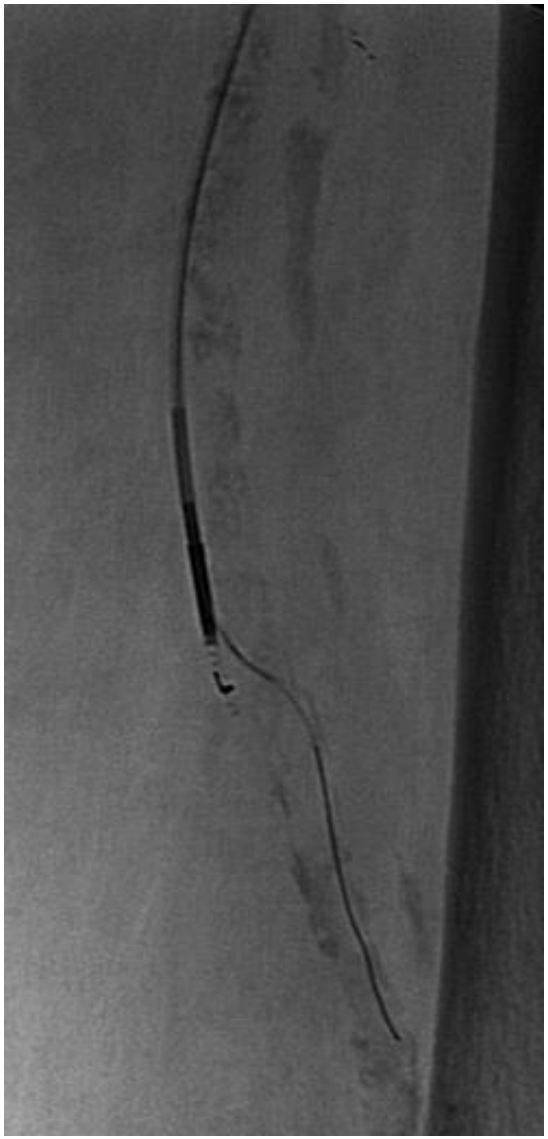


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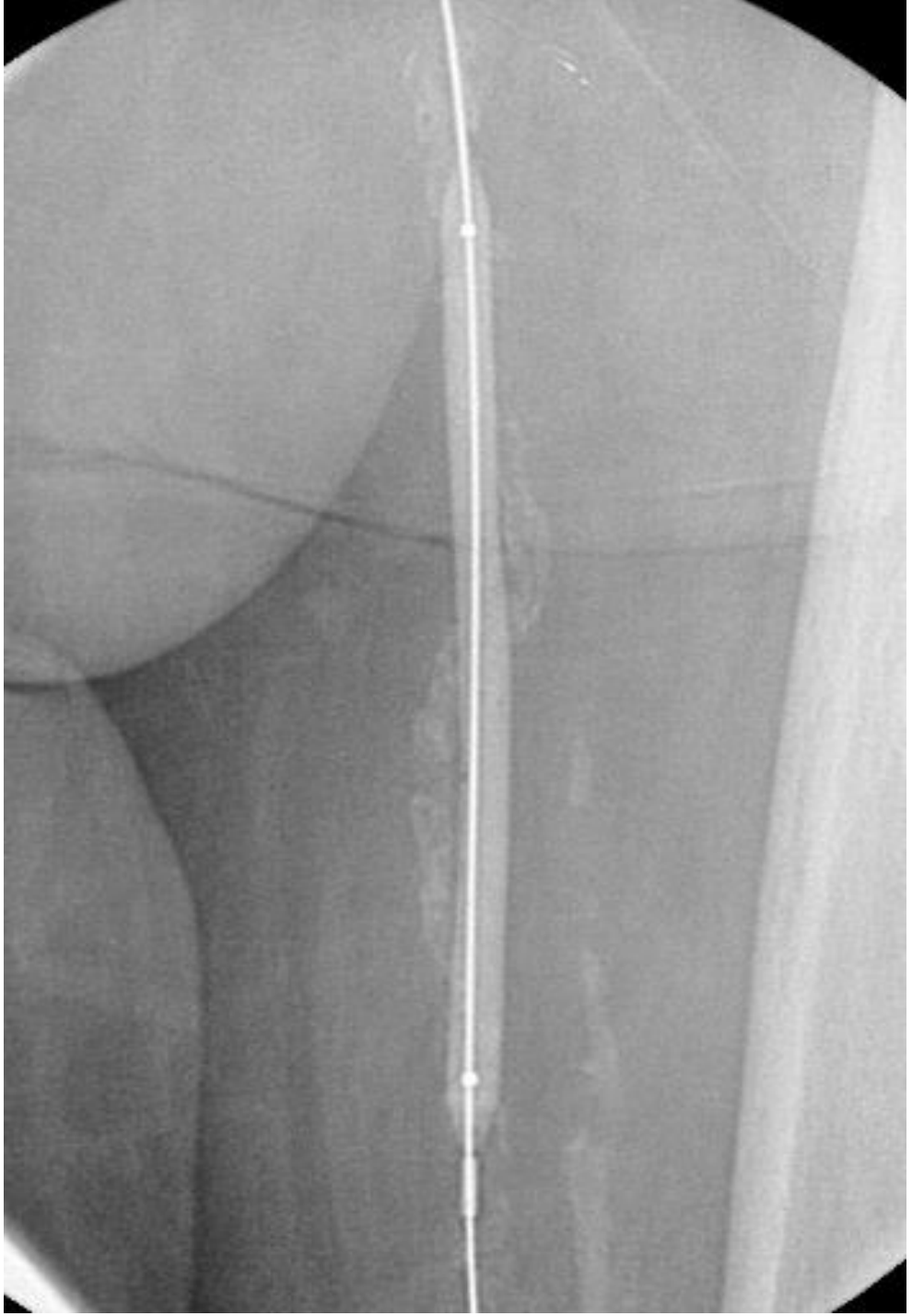


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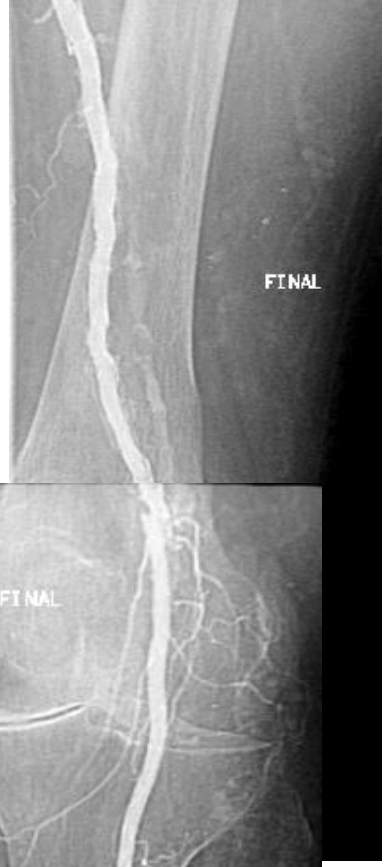
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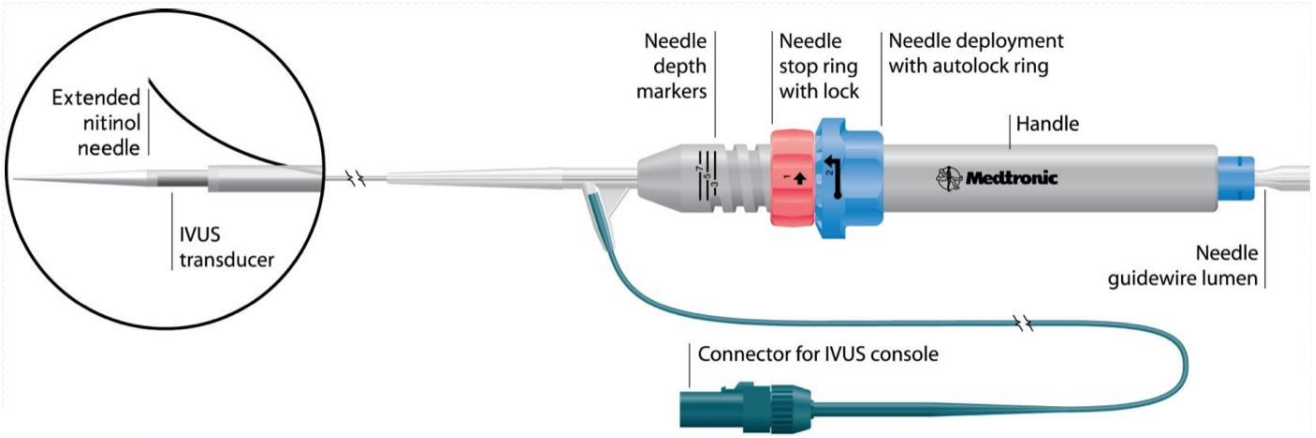
Recanalization of FEM POP CTO

PIONEER CATHETER

IVUS guided reentery device

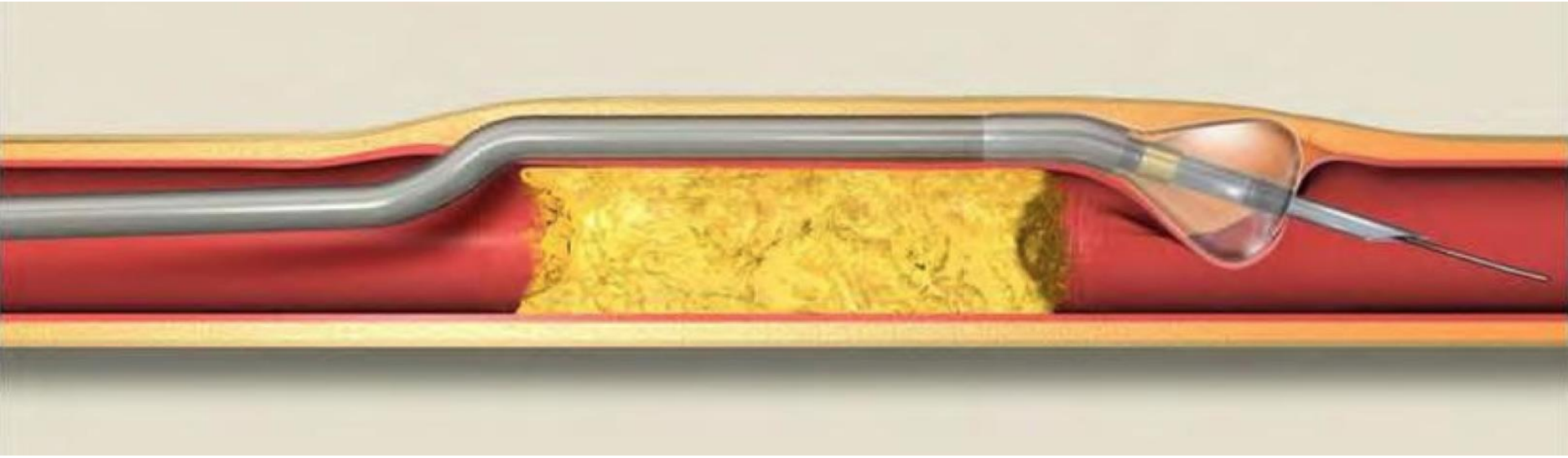
21 G Needle

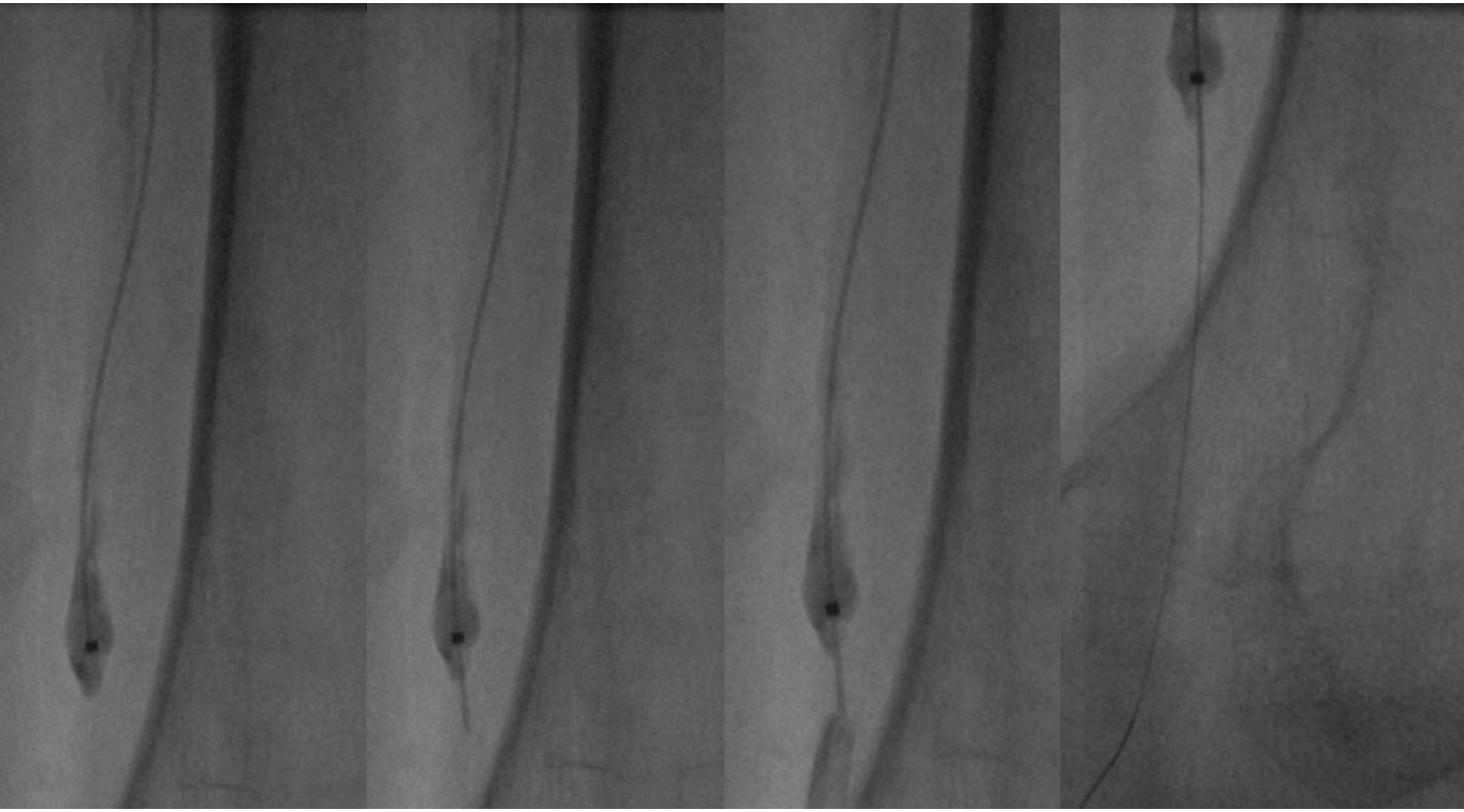
6 FR Compatible



Recanalization of FEM POP CTO

Off Road Re-entery Catheter System





M. Akesson; Vascular Centre Skane University Hospital, Malmo, Sweeden

Conclusions

- In long FP occlusions we need to manage the double approach technique to increase the technical success rate.
- In proximal and intermediate failure of antegrade approach we essentially use the double approach technique.
- In the distal failure of antegrade recanalization we can decide to use or a double approach or a re-entery device.
- The use of a re-entery device is expensive and not always faster, it can help operators that begin complex CTO recanalizations.