



i-MEET
NEXT GENERATION
Multidisciplinary European Endovascular Therapy

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BTK recanalization...styles around the world.Intervention :

The Romantic French Style

06/06/2019 - 9h30 - 15mn

Disclosure of Interest

Disclosure

Speaker name:

.....Jérôme BRUNET.....

I have the following potential conflicts of interest to report:

- **Consulting** : Abbott, Biotronik, Boston, Cook, Medtronic, Philips, Terumo.
- Employment in industry: 0
- Shareholder in a healthcare company: 0
- Owner of a healthcare company: 0
- Other(s): 0

I do not have any: potential conflict of interest

Limb salvage is definitively not a romantic job



Surgeons amputating a man's leg, 1793
(Wellcome Library London)

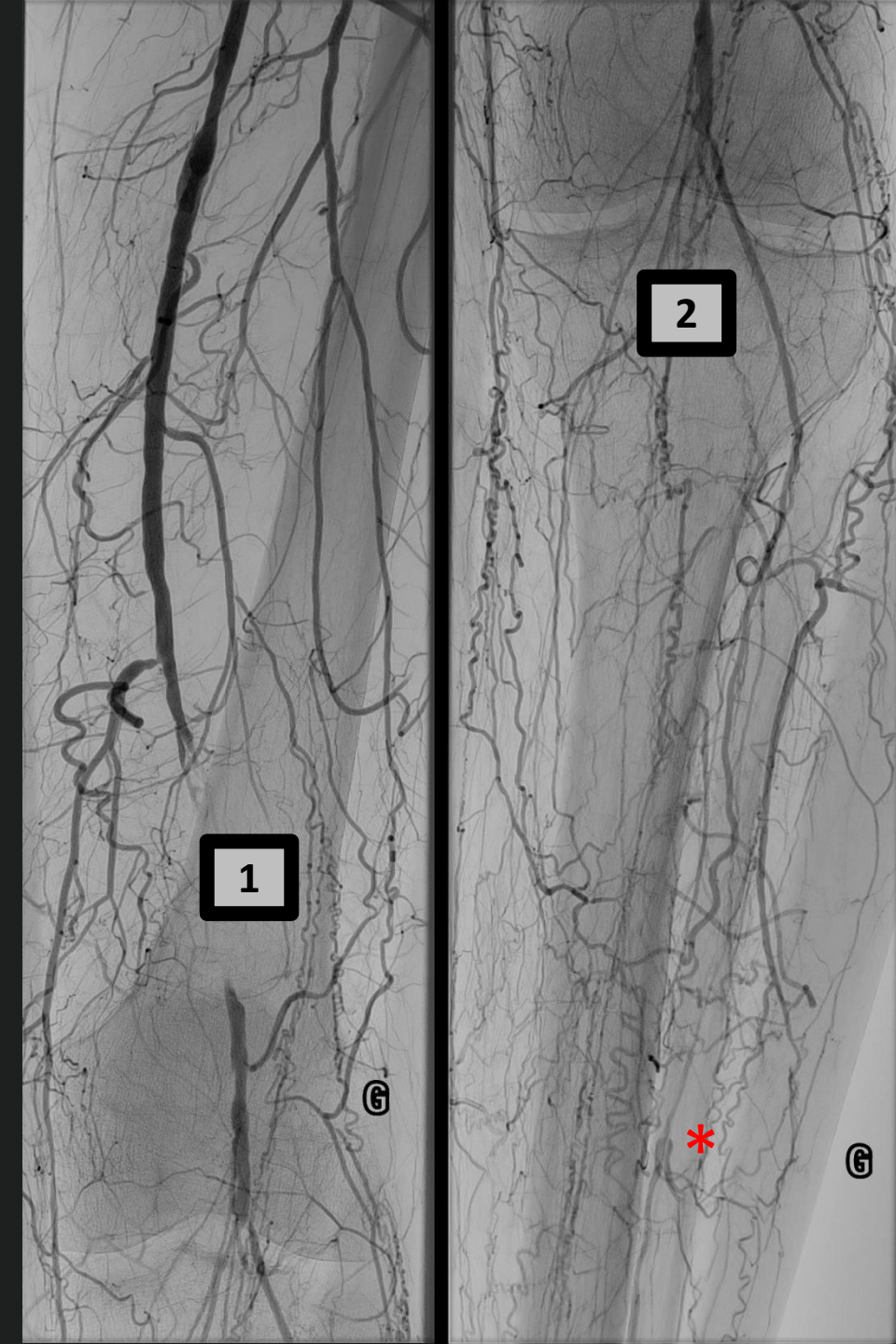
Case 1

- **Male, 58 yrs, smoker, CAD,**
- **2010:** onset of left claudication
 - Left Popliteal artery occlusion.
 - Medical treatment
- **10/2018:** Post traumatic foot ulcer
- **11/2018:** Femoro-pedal bypass (vein, allograft)
- **01/2019:** Graft occlusion - Wound worsening

Angio = 3 level disease

1. Short popliteal occlusion (P1)



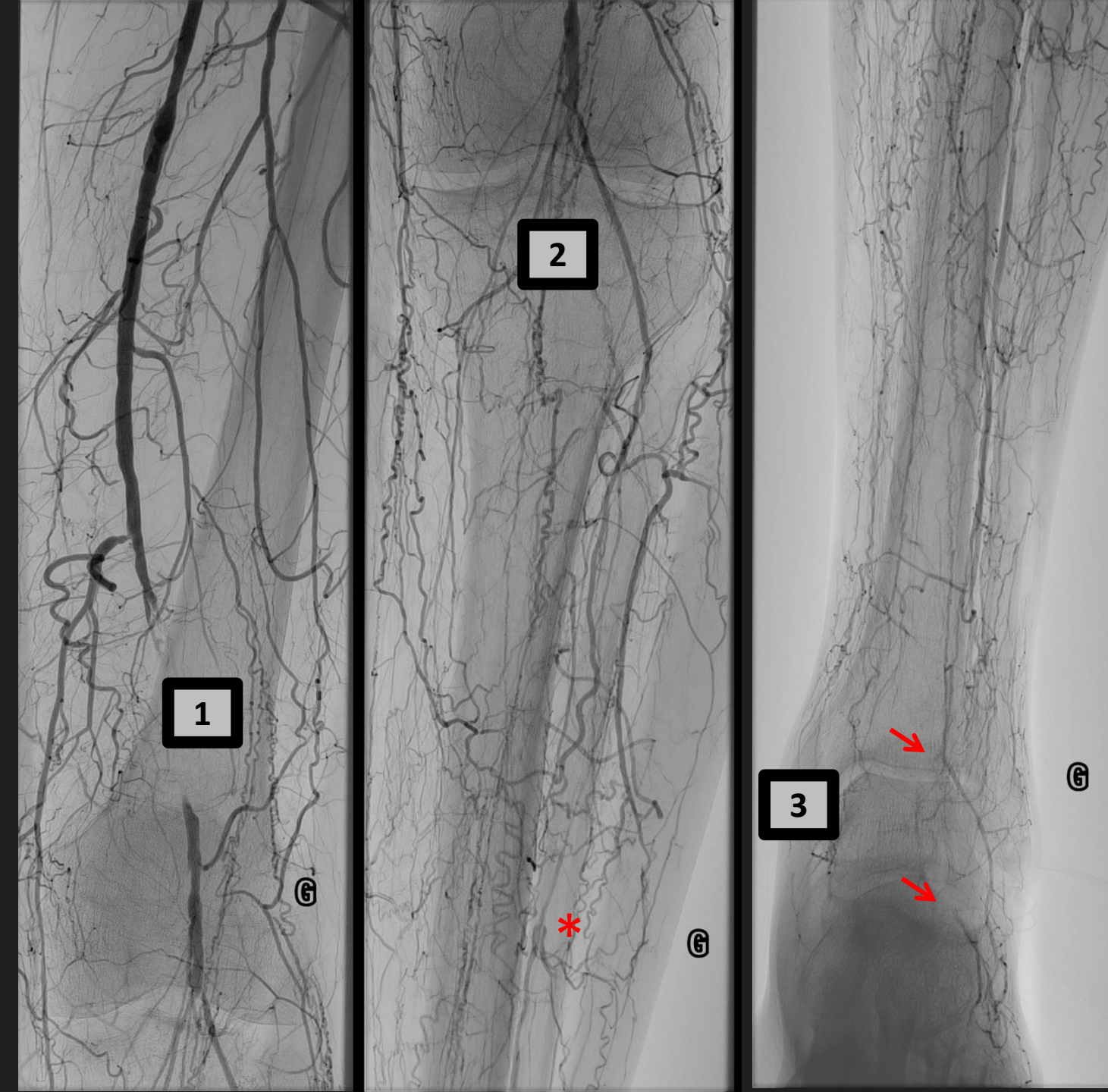


Angio = 3 level disease

1. Short popliteal occlusion (P1)
2. Long popliteo-tibial occlusion with ATA reinjection at the mid part (*)

Angio = 3 level disease

1. Short popliteal occlusion (P1)
2. Long popliteo-tibial occlusion with ATA reinjection at the mid part (*)
3. Pedal occlusion





Issue n°1

Find the popliteal vessel despite collaterals and lack of calcification

Issue n°2

Find the tibial bifurcation and progress toward ATA despite lack of visible run-off

Where should i go? ... Please , Show me the way !



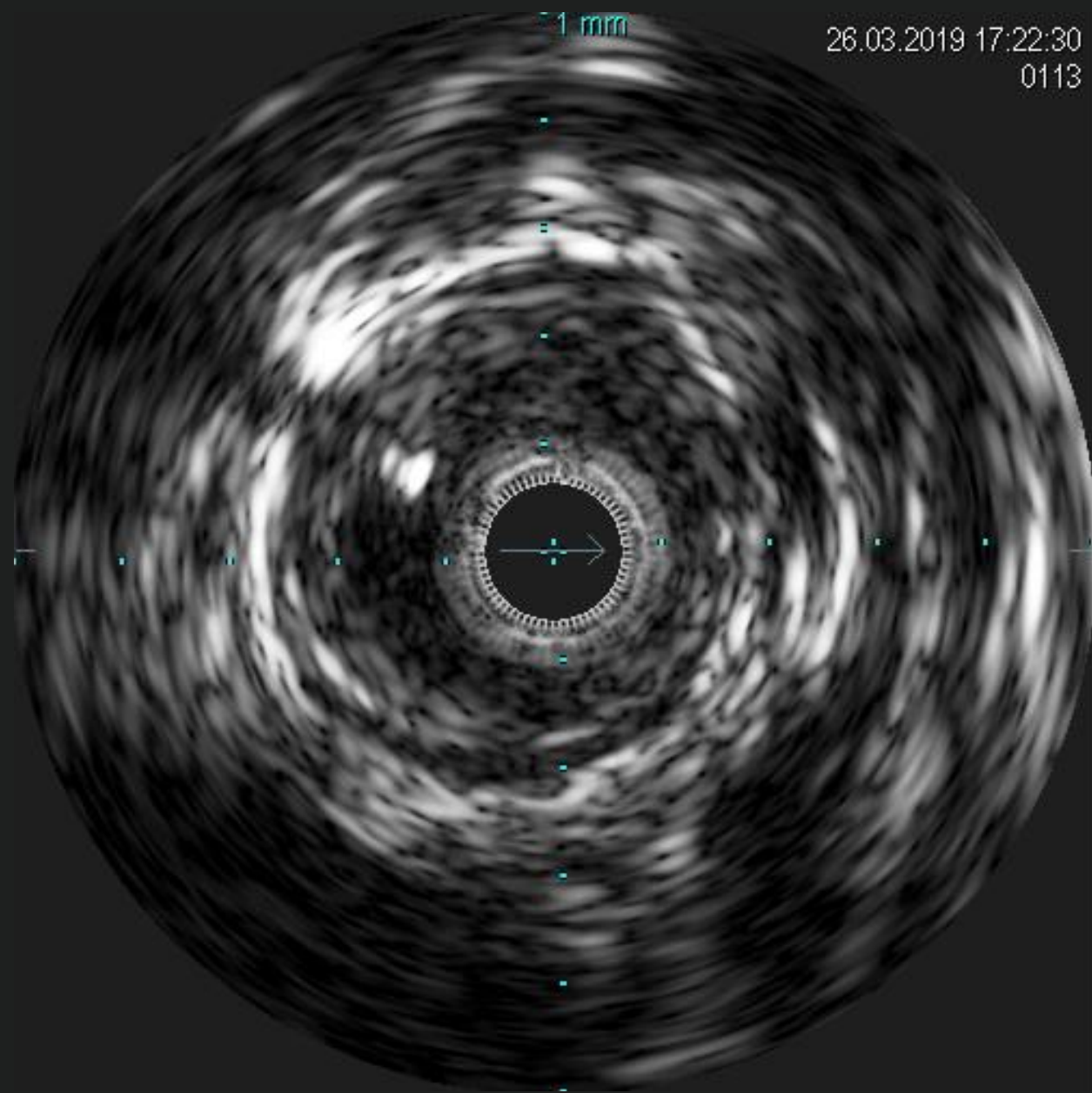
So Romantic+



BTK recanalization is -usually- not romantic



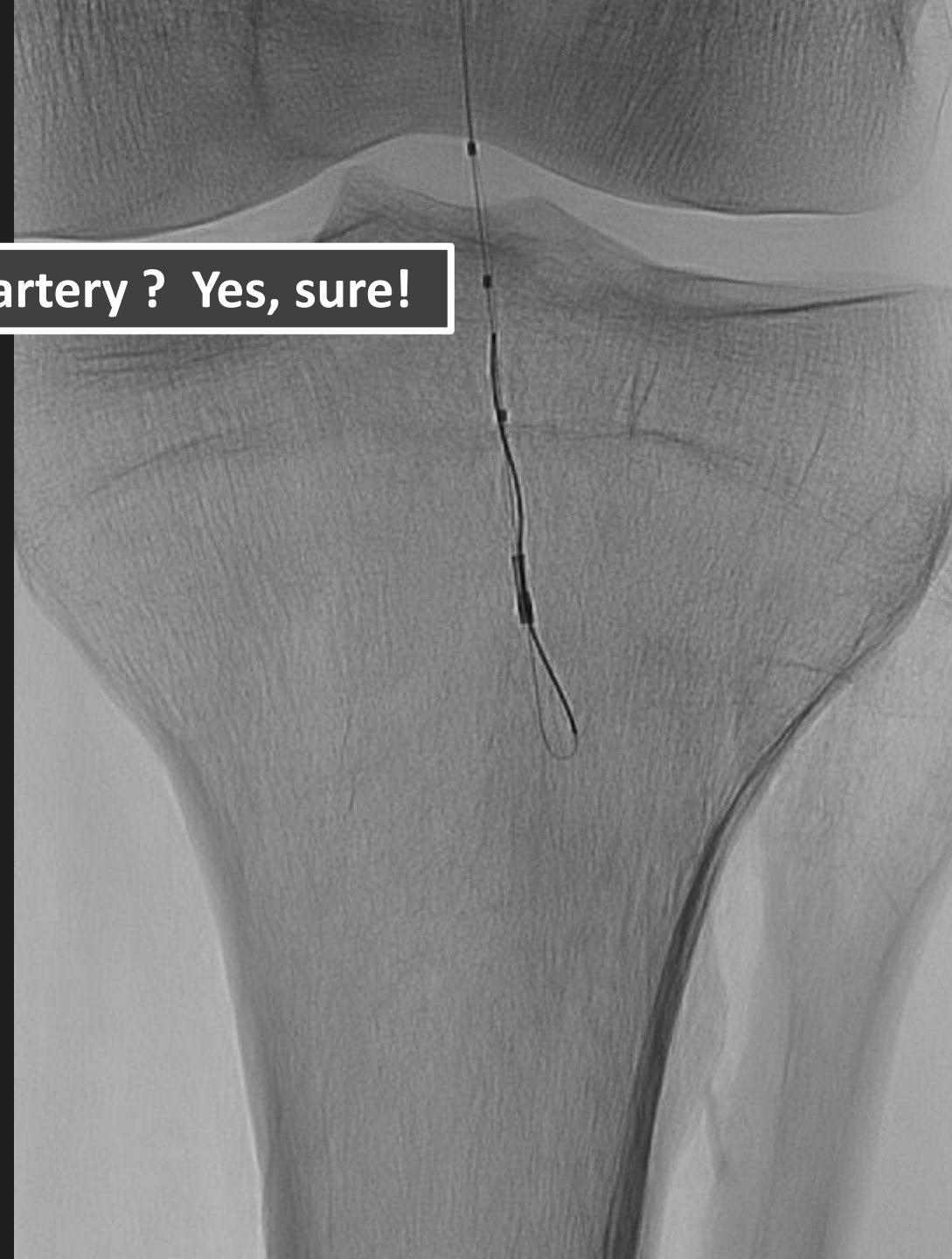
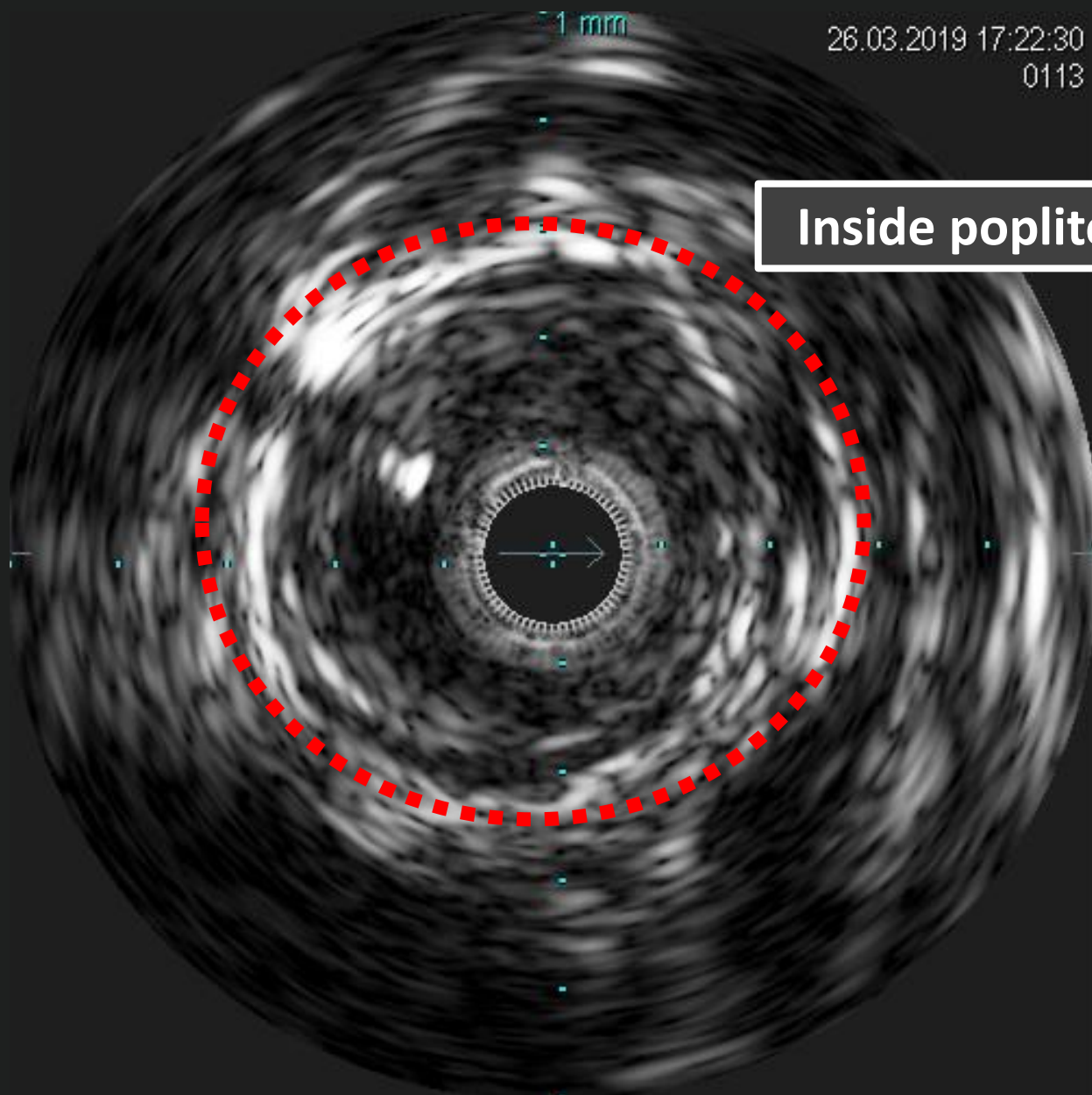
26.03.2019 17:22:30
0113



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0113

1 mm

Inside popliteal artery ? Yes, sure!

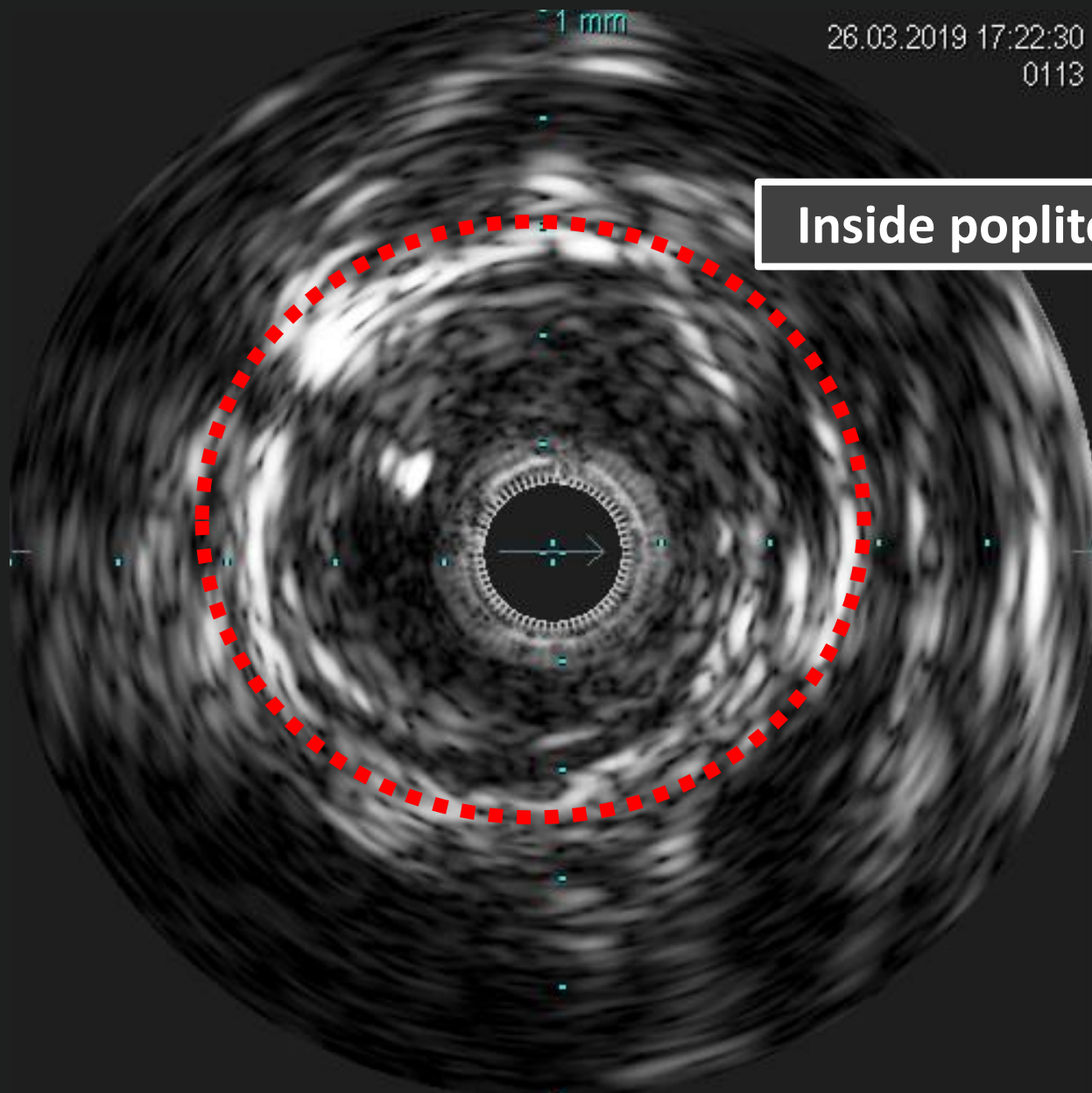


Mix 0.14Confianza Pro 12 & Gaia 3(Asahi) then Command ES (Abbott)
IVUS 0.14 Eagle-Eye (Philips Volcano)

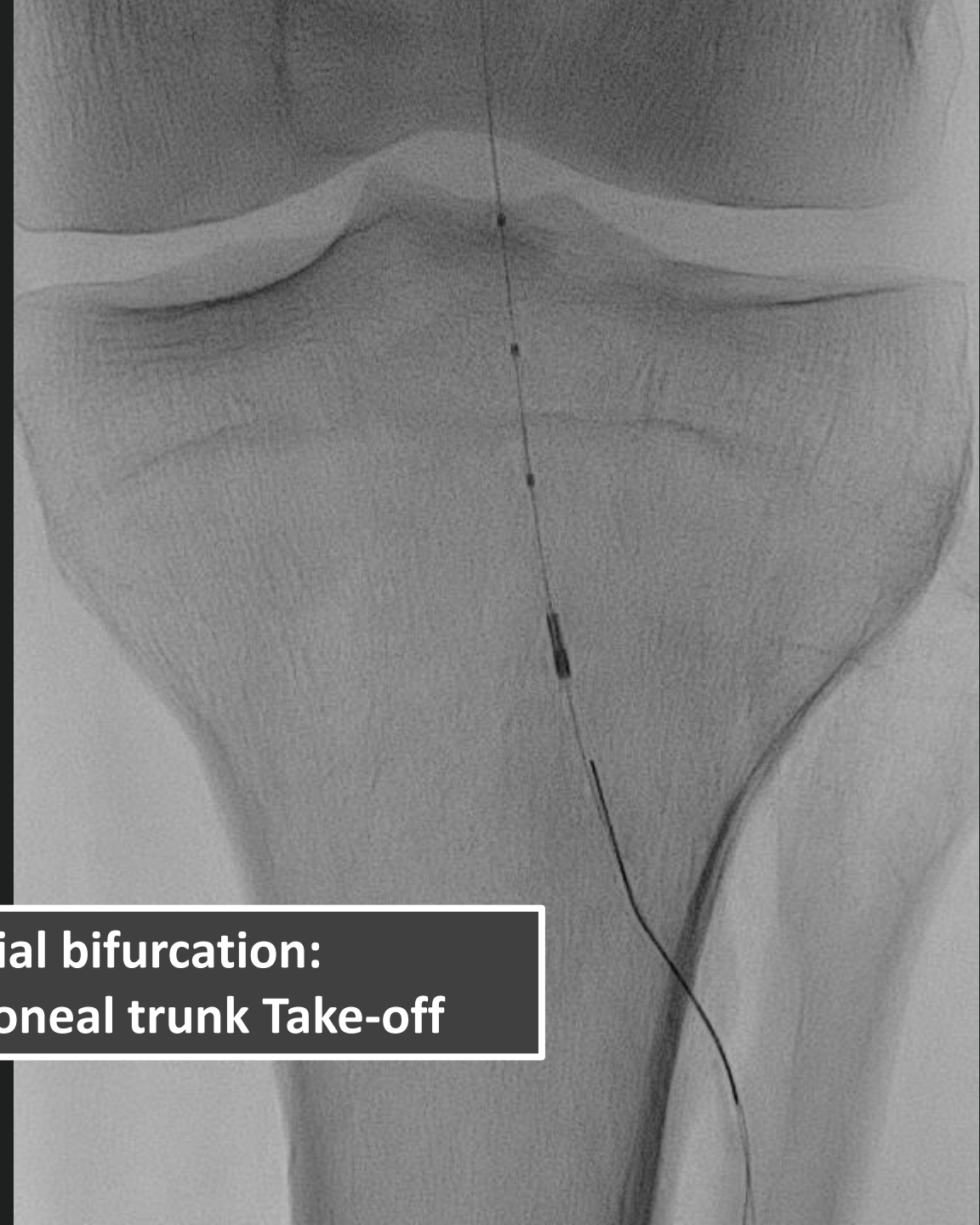
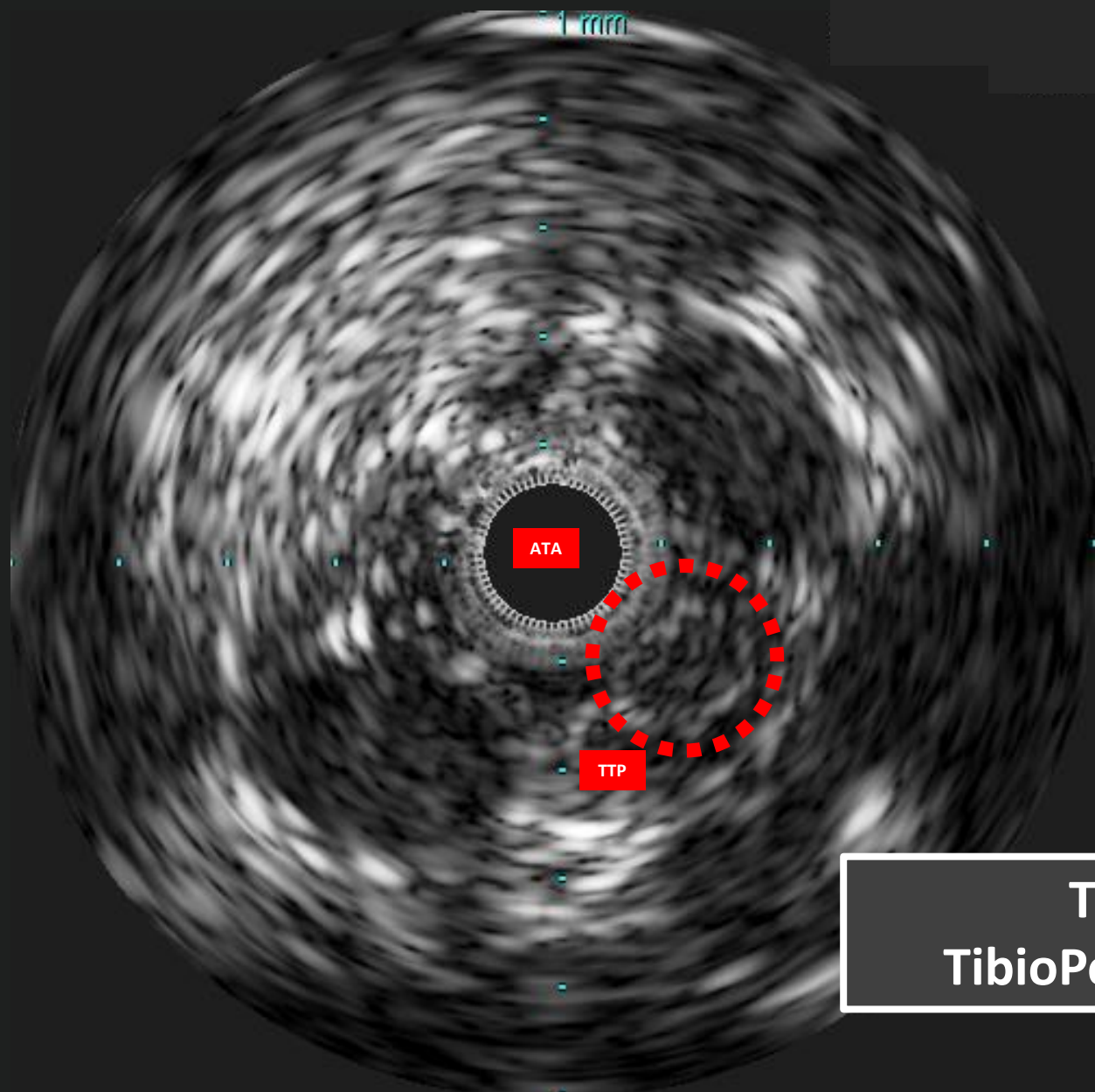
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1 mm

Inside popliteal artery ? Yes, sure!

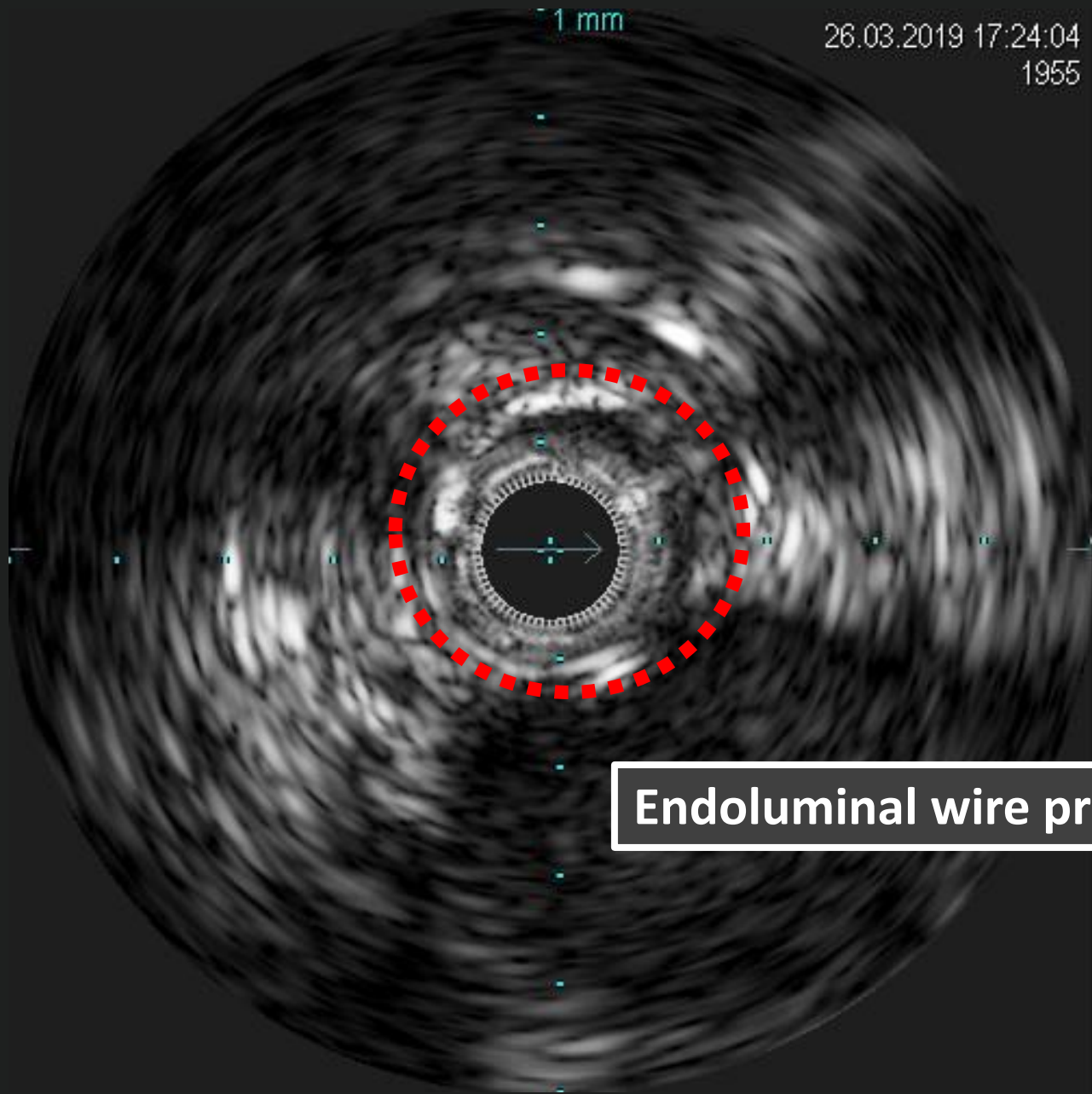


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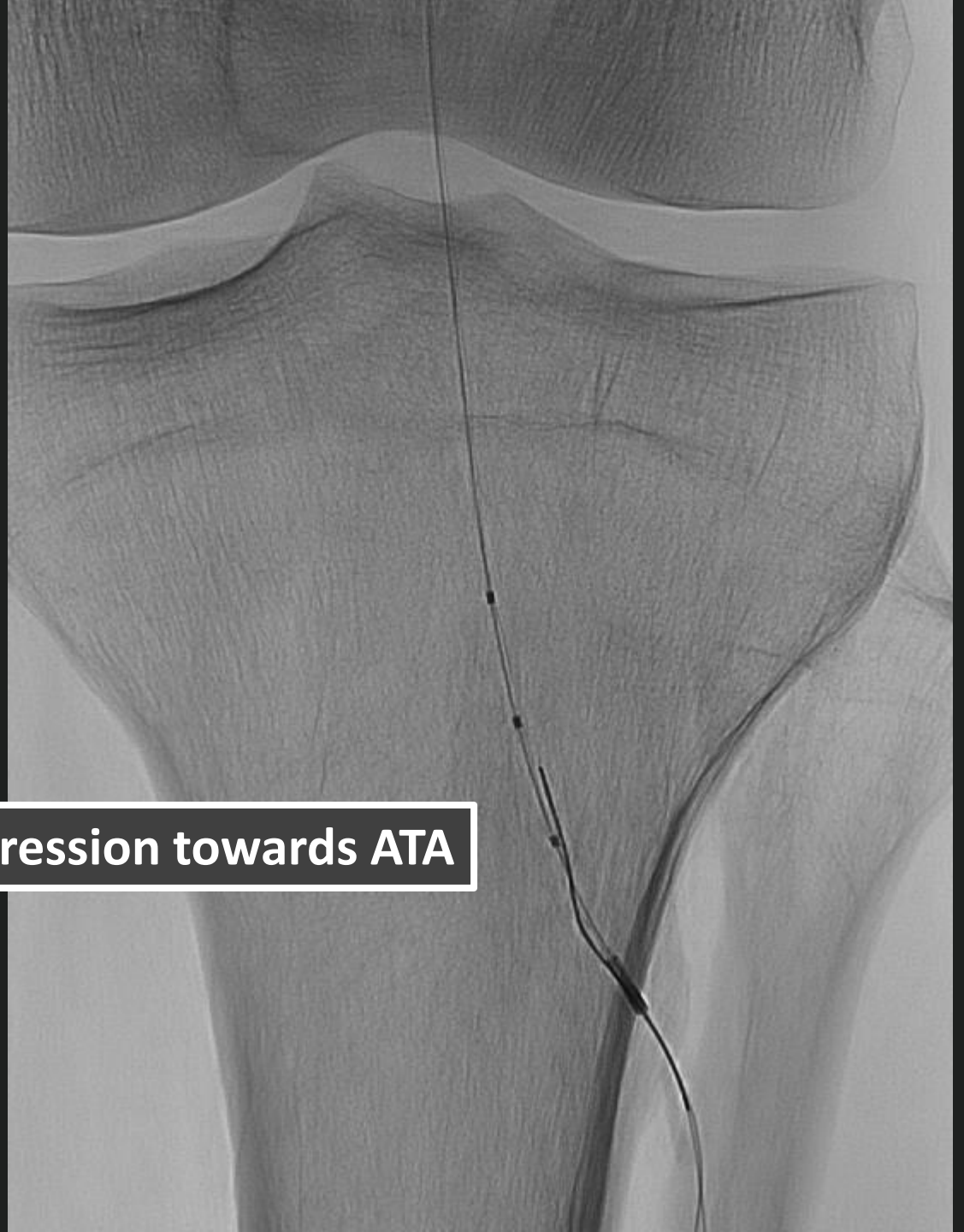
**Tibial bifurcation:
TibioPeroneal trunk Take-off**

Mix 0.14Confianza Pro 12 & Gaia 3(Asahi) then Command ES (Abbott)
IVUS 0.14 Eagle-Eye (Philips Volcano)

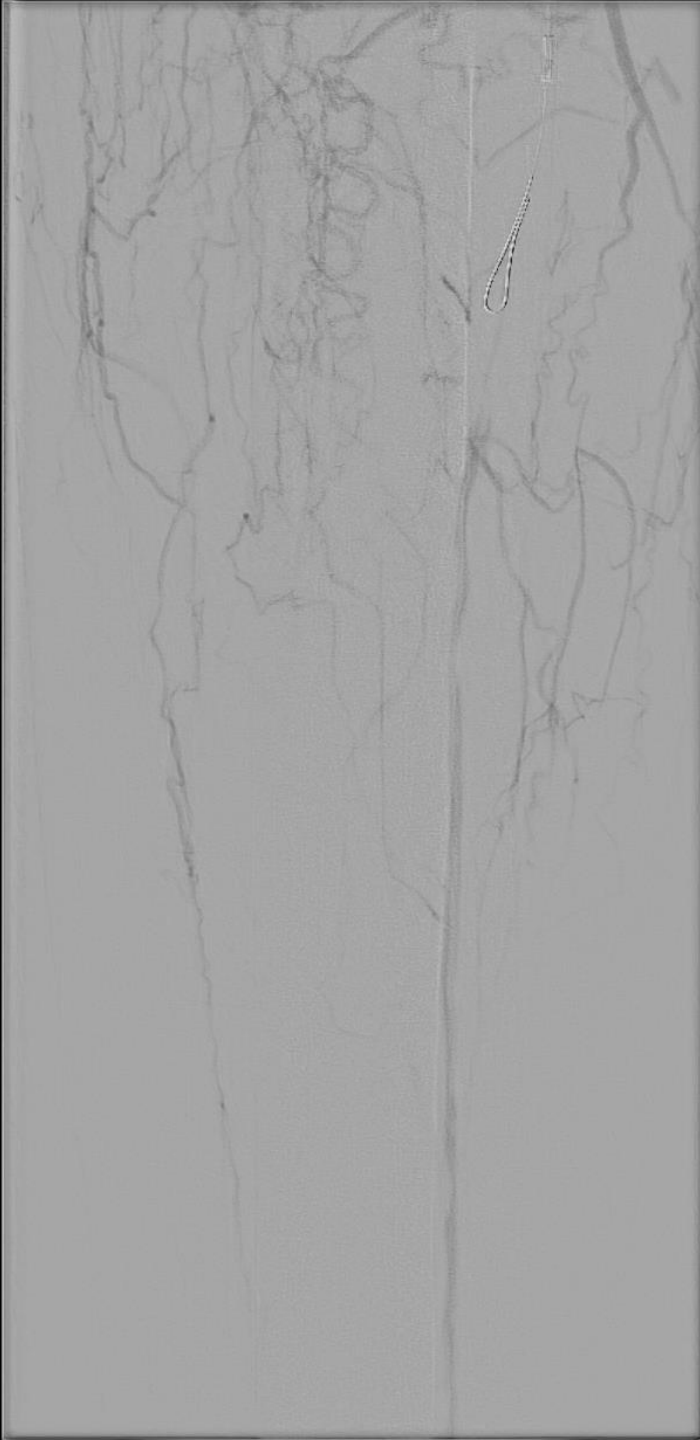


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1955

Endoluminal wire progression towards ATA



Mix 0.14Confianza Pro 12 & Gaia 3(Asahi) then Command ES (Abbott)
IVUS 0.14 Eagle-Eye (Philips Volcano)



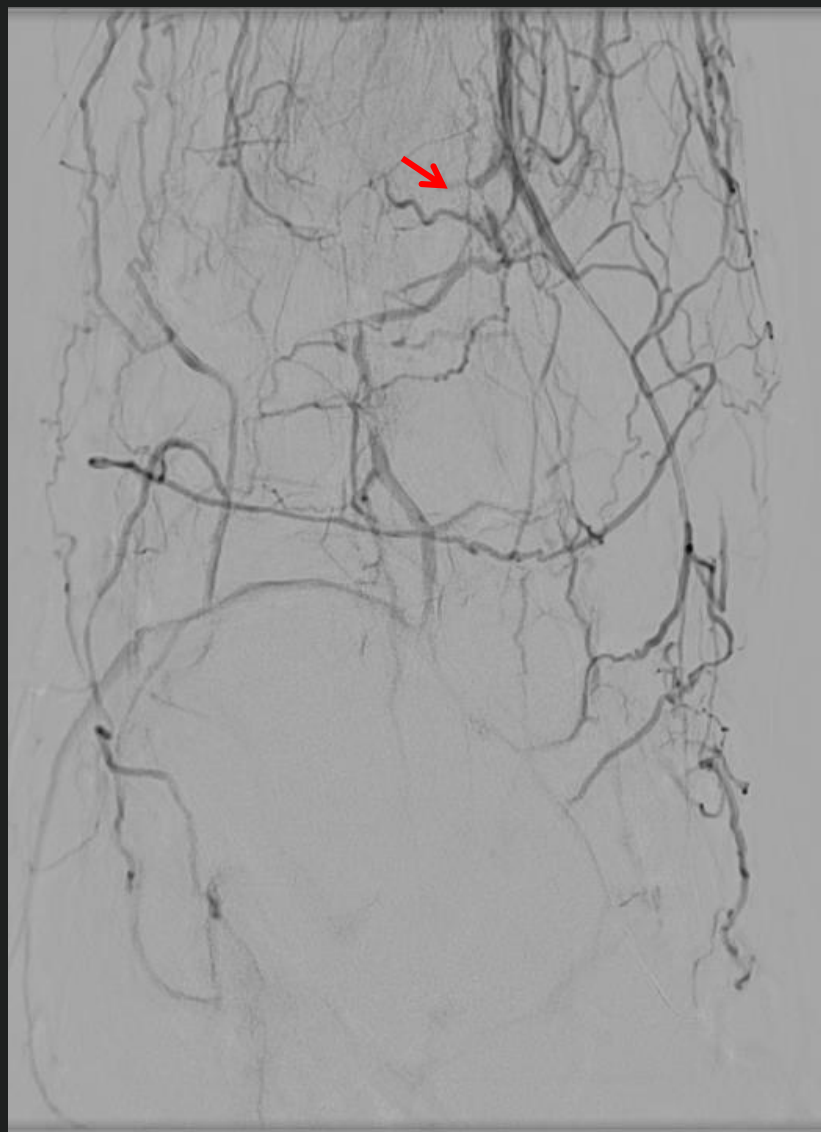
AVANT PTA

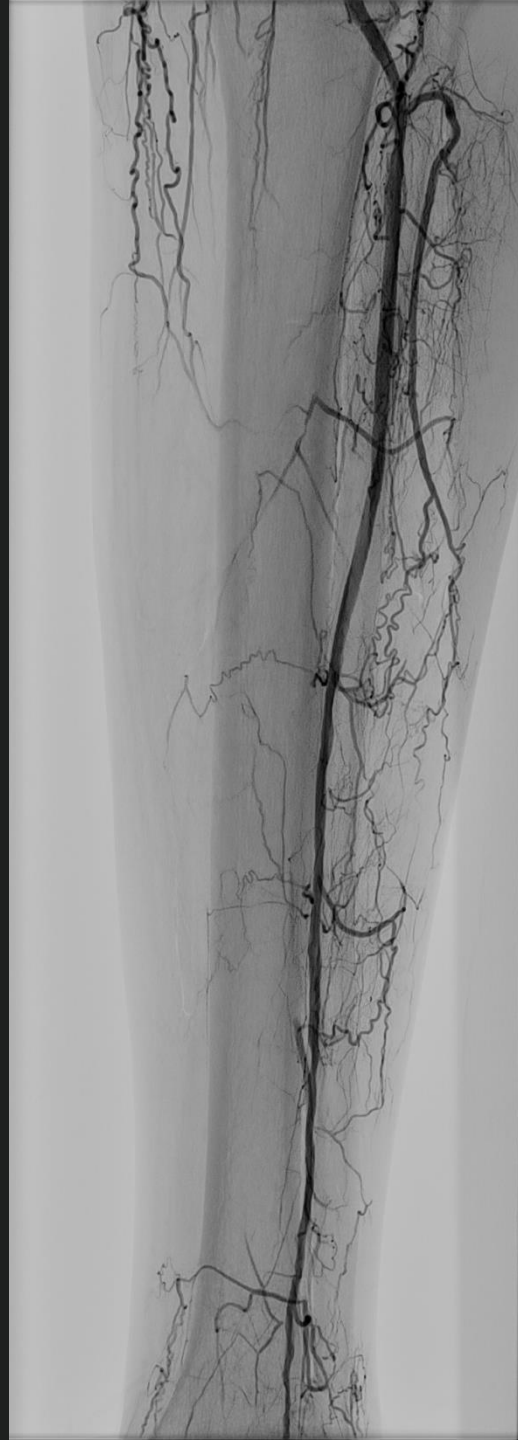
G



IVUS catheter
as a support catheter

Last step: Pedal Artery Recanalization





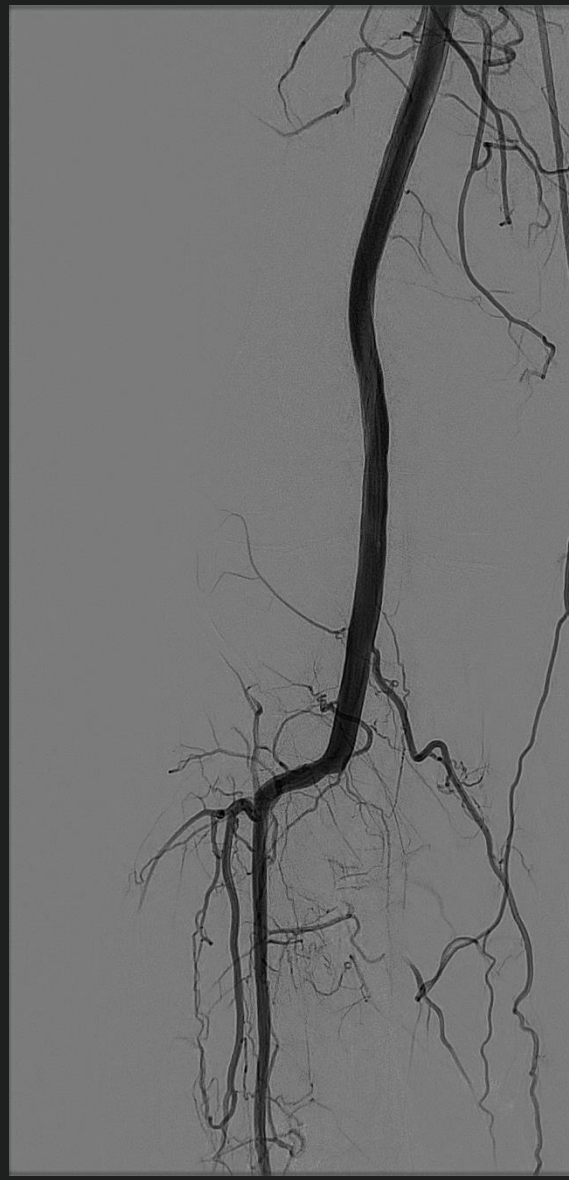
Final result

Case 2

- **Male 54yrs**
- **Smoker – HTN**
- **Plantar claudication and Rest pain**

1st step : Exclusion Popliteal Aneurism (Viabahn)

2nd step : Recanalization short and proximal ATA occlusion (Xience BTK)



Failure by antegrad

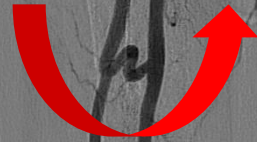


2nd step:
Recanalization TTP (ostial occlusion)

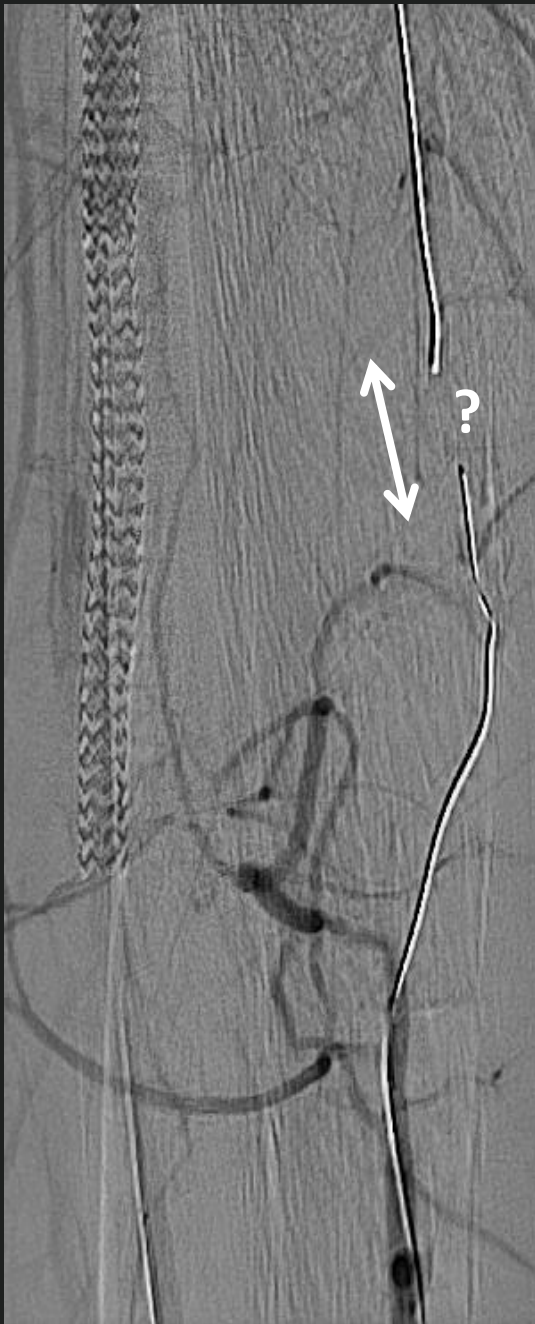
Failure by antegrad

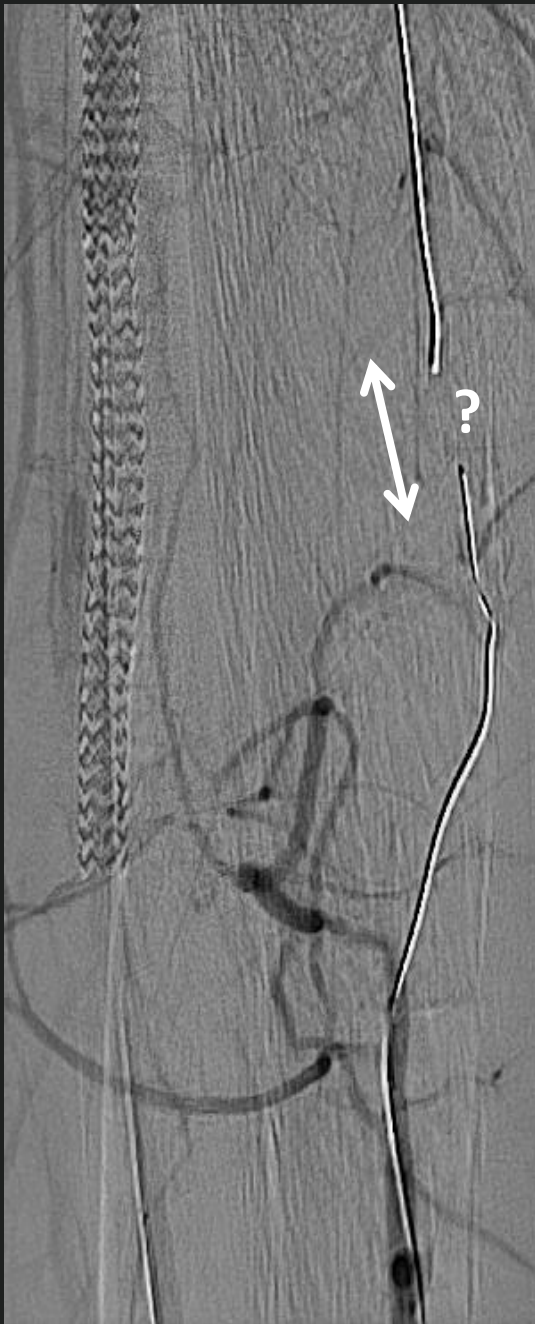


Retrograd via collateral

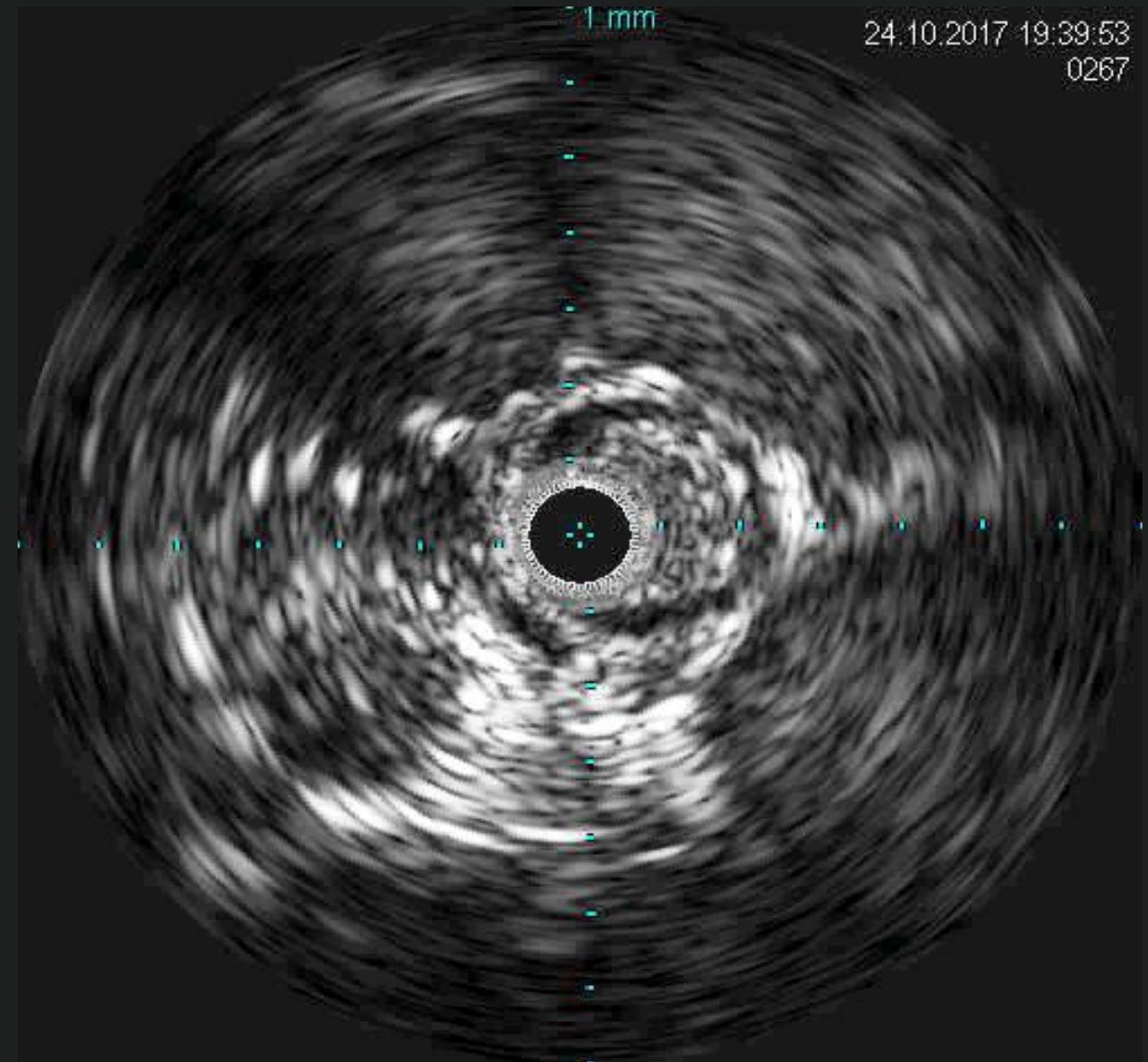


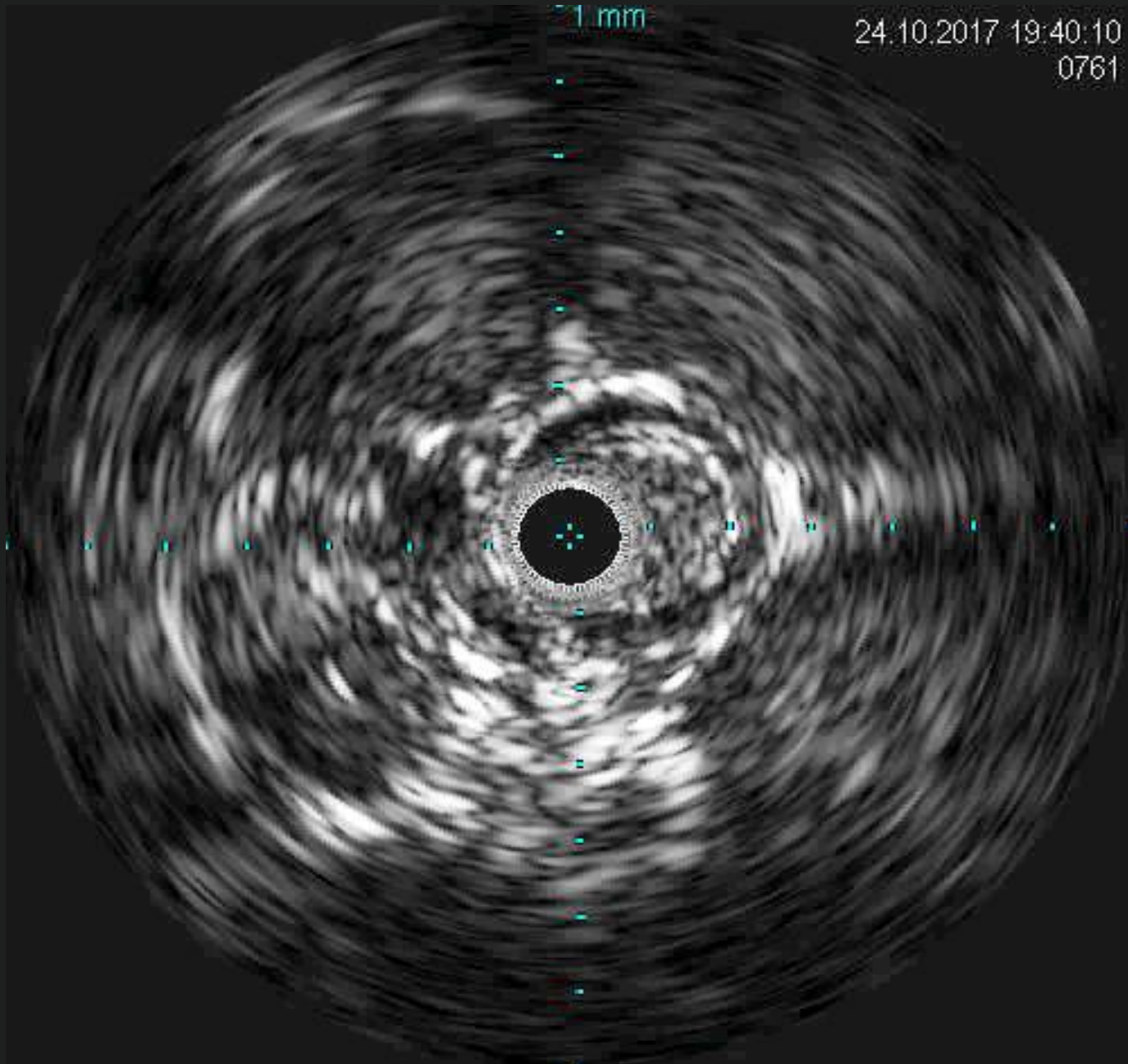
2nd step:
Recanalization TTP (ostial occlusion)





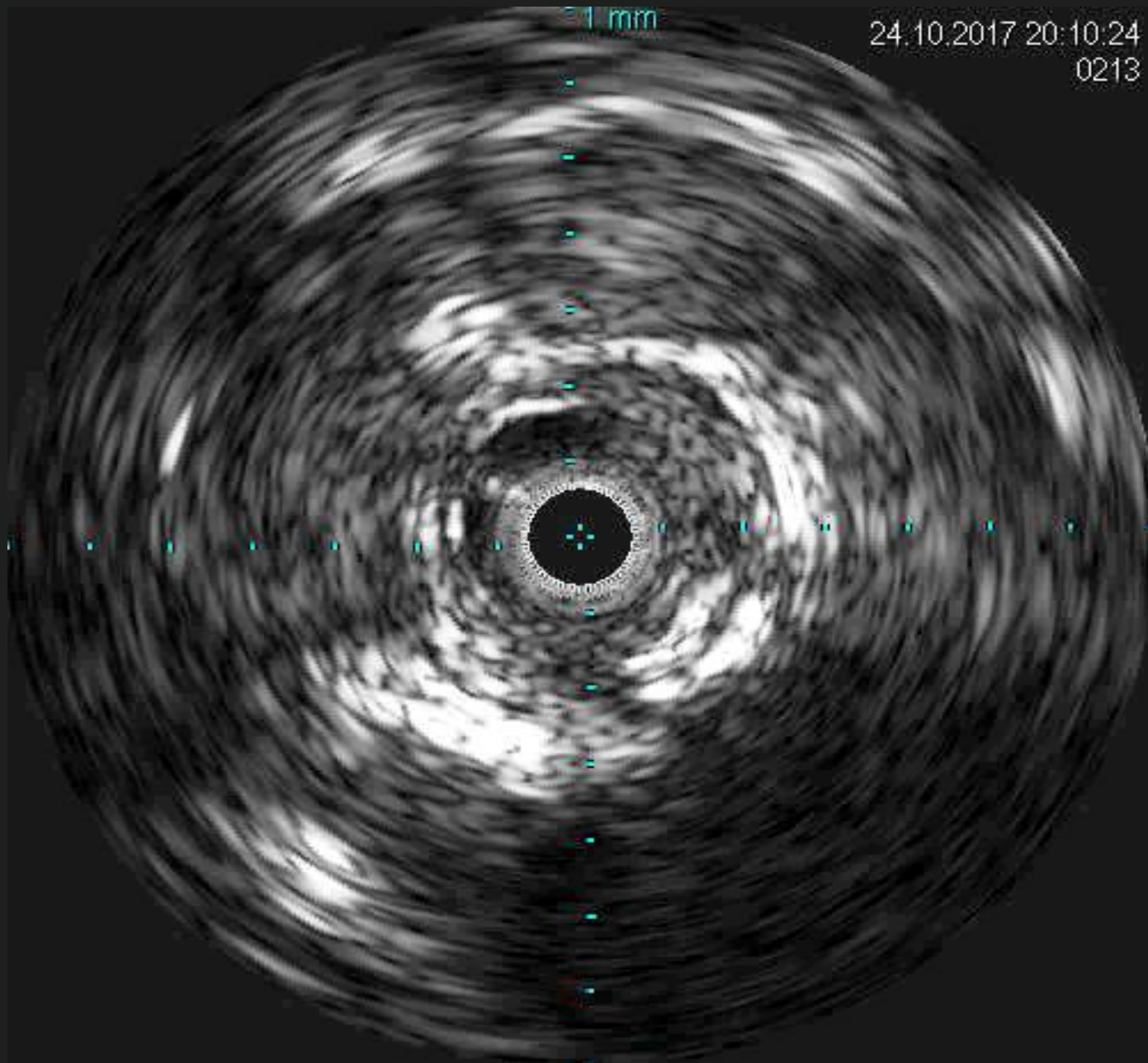
Antegrad IVUS :
Retrograd wire is far
from to true lumen
(6 o'clock)



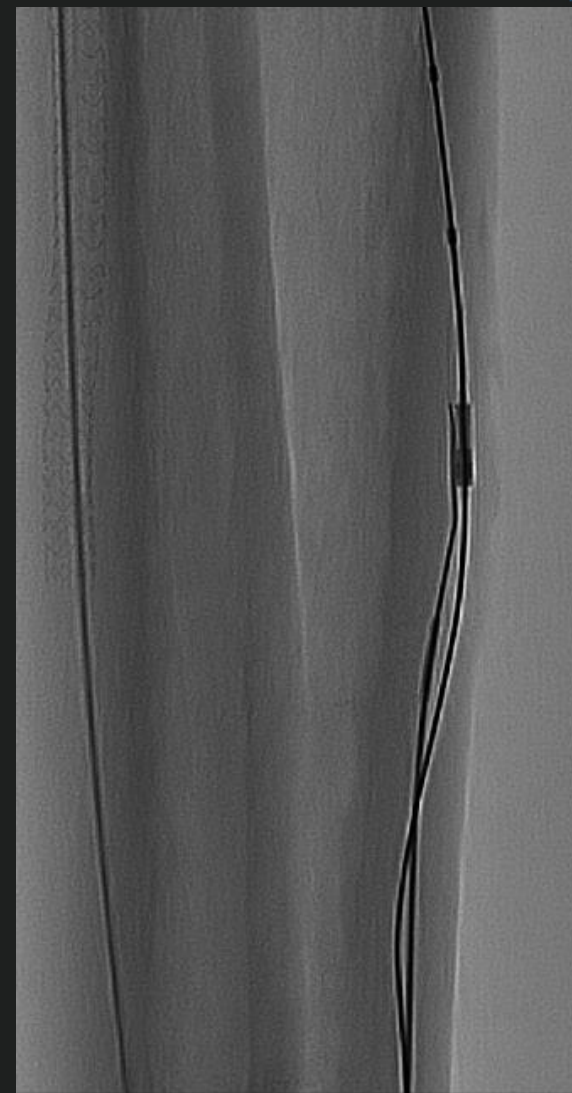


Retrograd wire is now very close to the true lumen (9 o'clock)

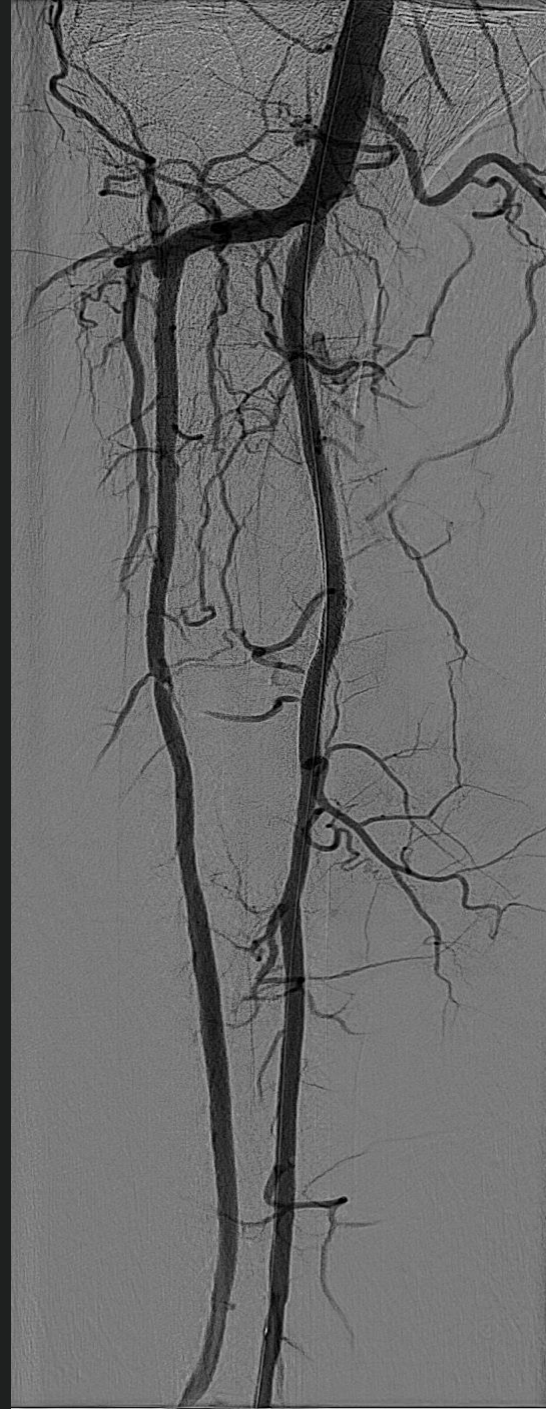
Next step is to exchange for a stiffer wire to cross the membrane



24.10.2017 20:10:24
0213



0.14 Astato40* guidewire (Asahi)
Teleport* microcathéter (Orbus Neicht)



Case 3

- **67yrs**
- **Smoker and diabetic**
- **Left Carotid surgery (2008) and CAD (2015, stenting LAD)**
- **Right leg: 2007 PTA SFA, 2015 PTA CIA**

- **Left leg**
 - **2008 : Left femoro-popliteal bypass for claudication**
 - **Oct 2017: CLI Rutherford V (maleolar ulcer)**

Patent fem/pop graft

Popliteal P2+P3
occlusion

PTA

ATA
occlusion

Patent fem/pop graft

Popliteal P2+P3
occlusion

PTA

ATA
occlusion

Ca ++

Wire outside
the vessel

Failure by antegrad

Patent fem/pop graft

Popliteal P2+P3
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PTA

ATA
occlusion

Ca ++

Wire outside
the vessel

Plan « B » : Retrograd access?



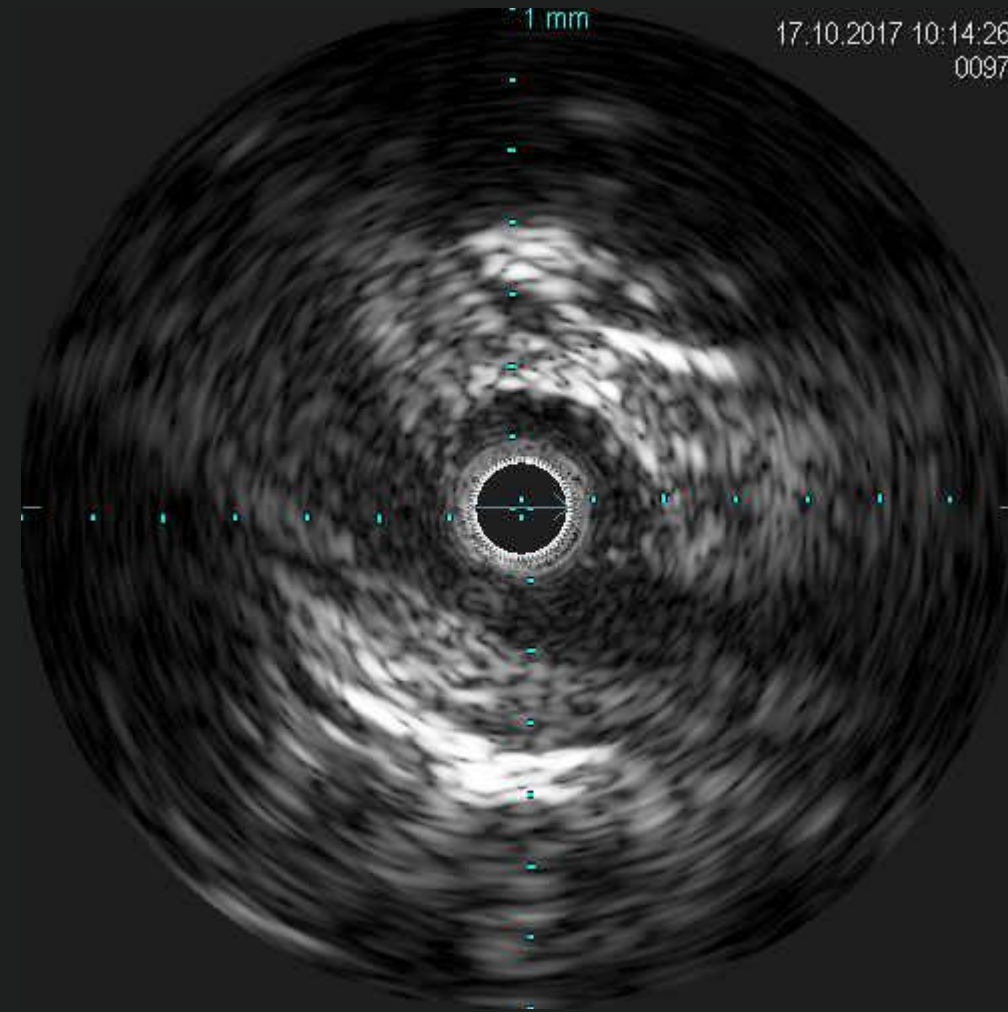
Game over ?



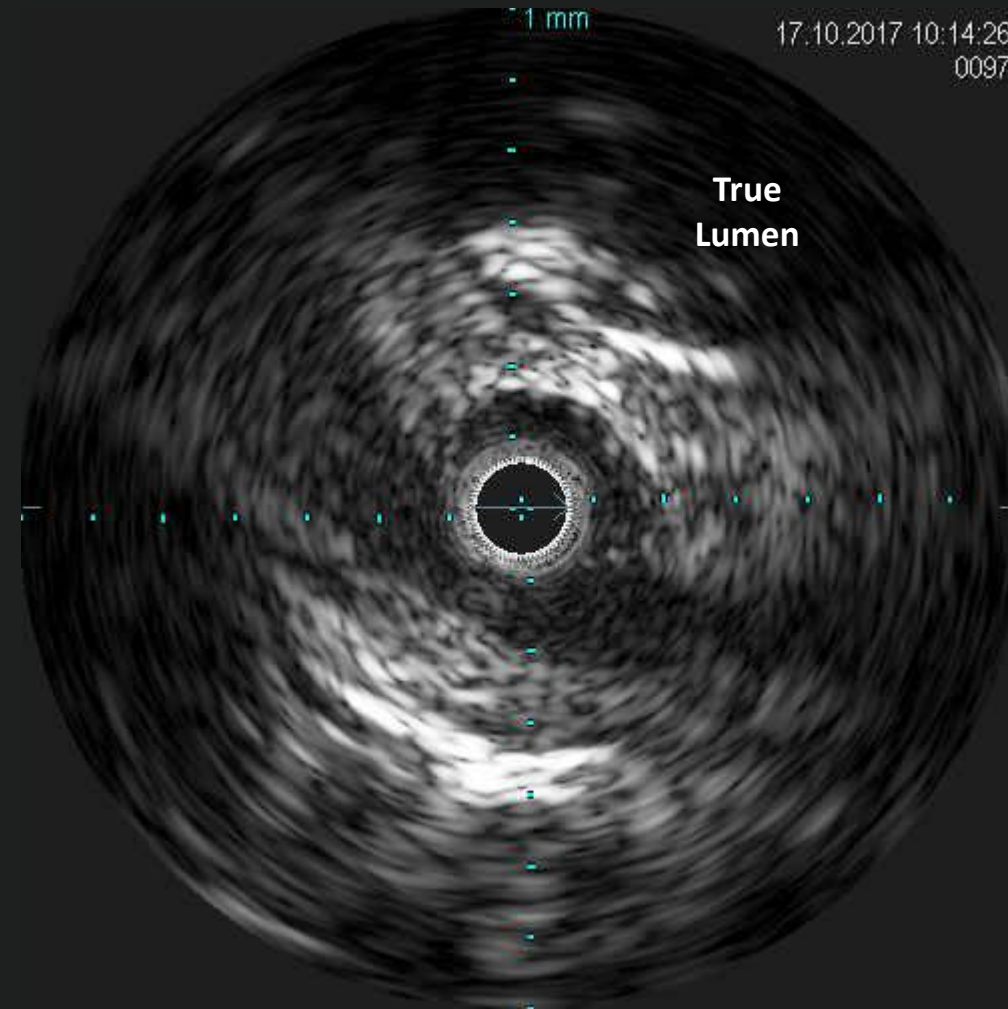
Call for a friend
Let's have a look with IVUS



IVUS provide capital information

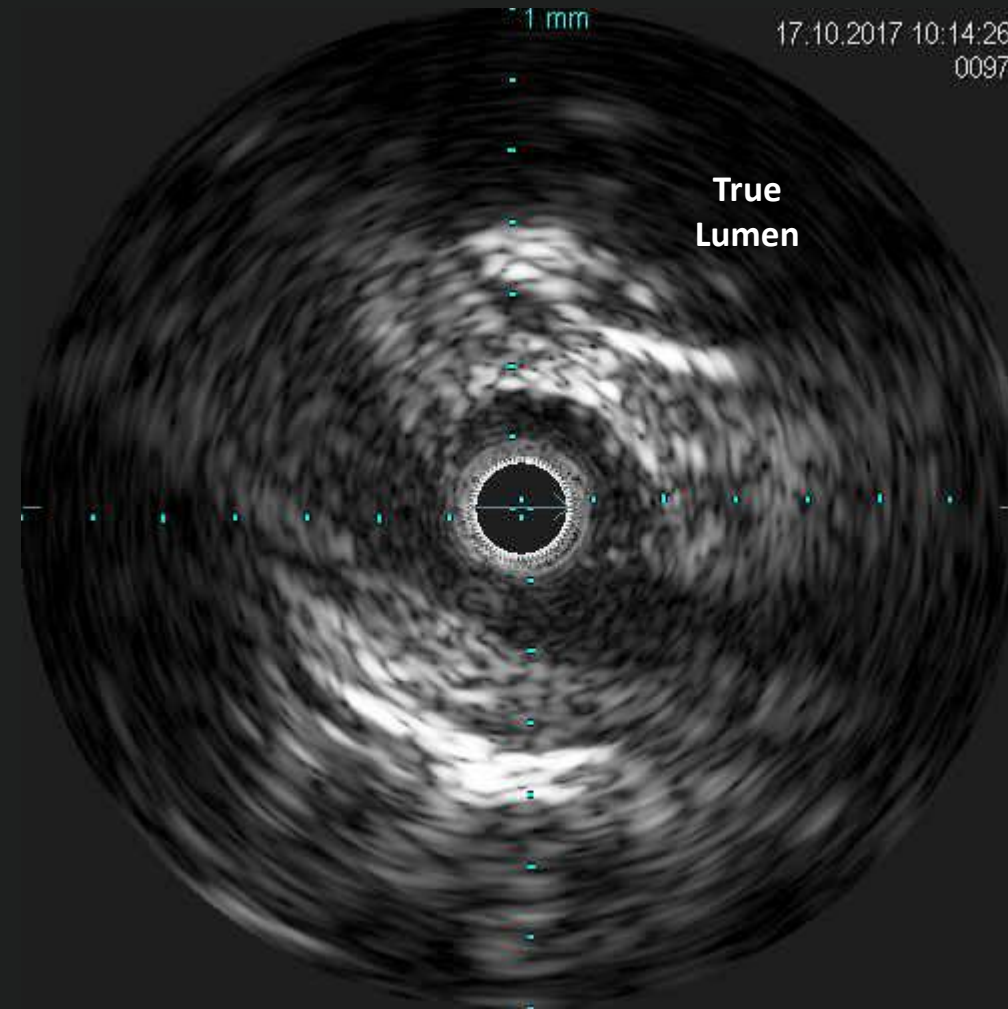


IVUS provide capital information



« Reachable »
re-entry site

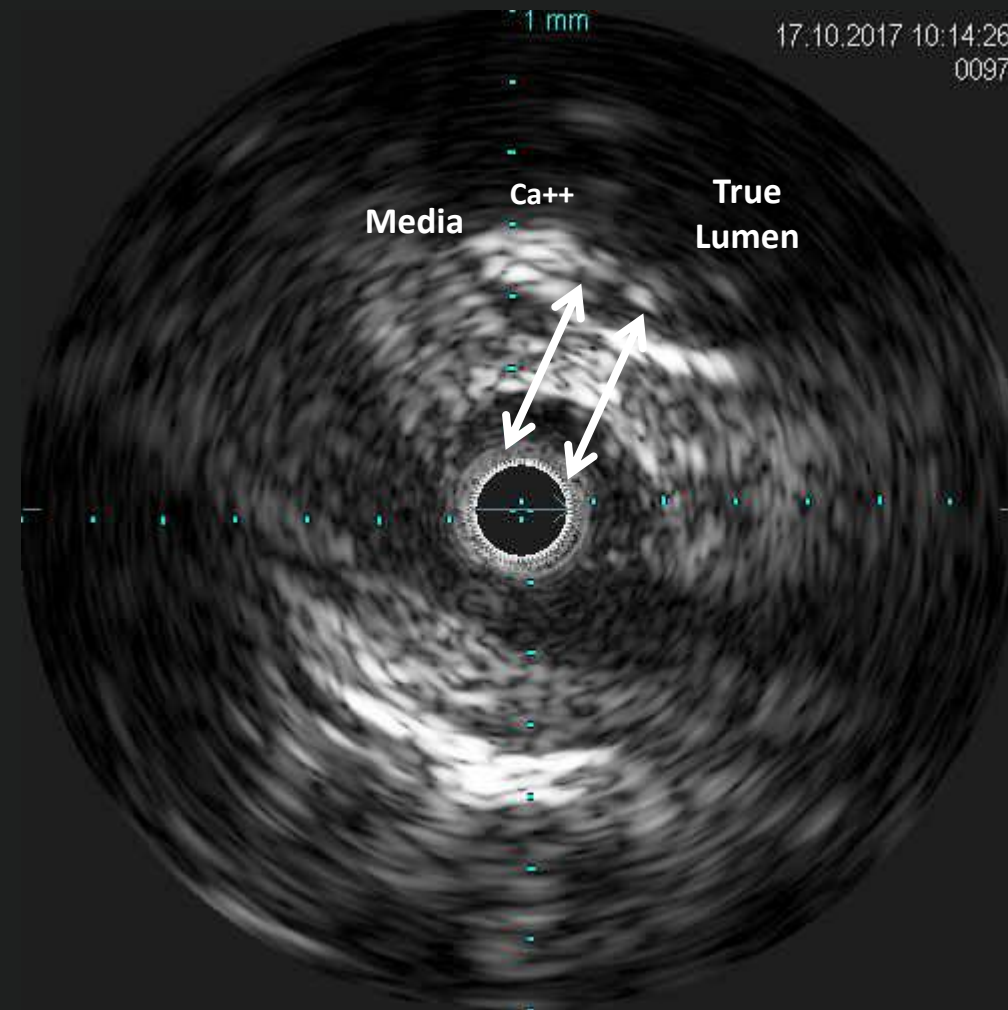
IVUS provide capital information



« Reachable »
re-entry site

But it is utopian to
want to cross with
the wire alone

IVUS provide capital information

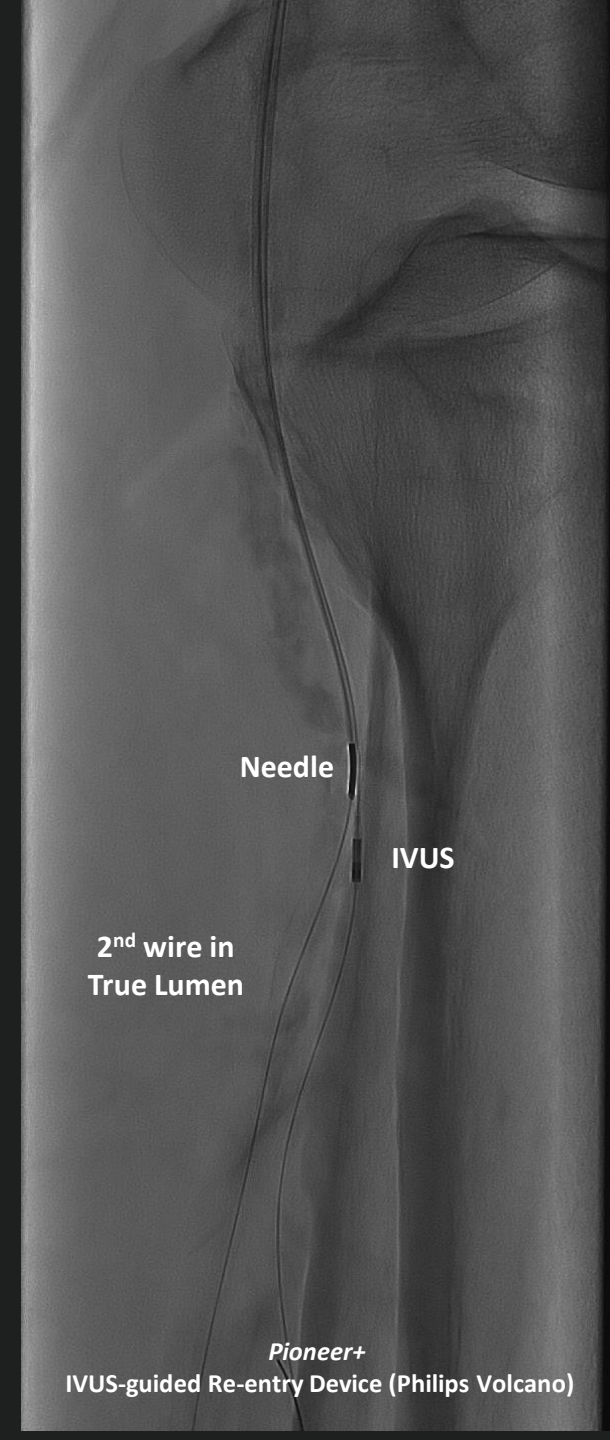
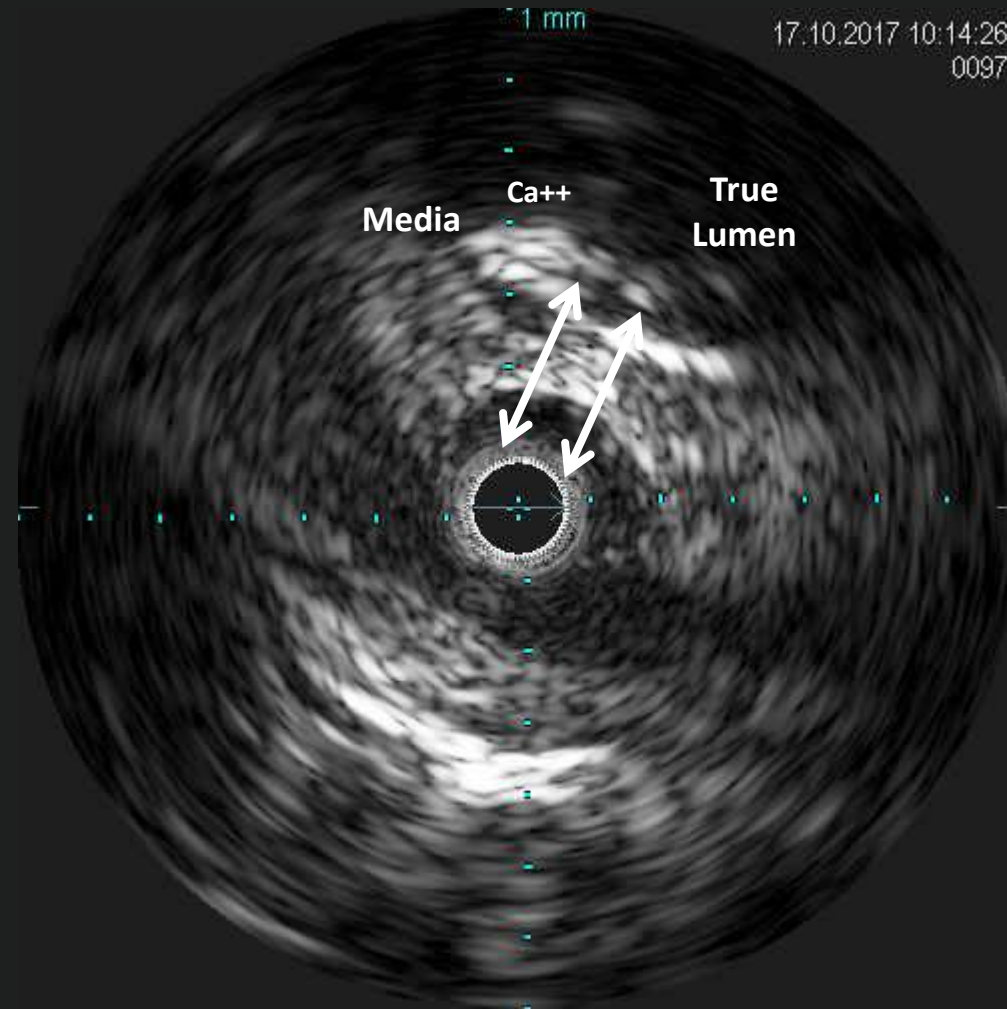


« Reachable »
re-entry site

But it is utopian to
want to cross with
the wire alone

calcification + thickness + extra-media location

IVUS provide capital information



PRE



POST



POP: Supera 5.5/150+100mm
TTP: Xience 4/28mm

“BTK recanalization...styles around the world Intervention :
The Romantic French style” : conclusion

IVUS : a romantic device in a classical toolbox?

“BTK recanalization...styles around the world Intervention : The Romantic French style” : conclusion

IVUS : a romantic device in a classical toolbox?

Can be helpful to find (or refind) the way

- **IVUS as a support-catheter to guide Antegrad crossing**
- **IVUS by antegrad to control and guide Retrograd crossing**
- **IVUS as rescue option to identify reachable re-entry area**

“BTK recanalization...styles around the world Intervention : The Romantic French style”: conclusion

Ad augusta per angusta
A des résultats grandioses par des voies étroites

Hernani

VICTOR
HUGO



Patent fem/pop graft

Popliteal P2+P3
occlusion

PTA

ATA
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Ca ++

Wire outside
the vessel

IVUS

Let's have a look with IVUS

Patent fem/pop graft

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