

CONTROVERSES ET ACTUALITÉS EN CHIRURGIE VASCULAIRE
CONTROVERSIES & UPDATES
IN VASCULAR SURGERY



JANUARY 23-25 2014

MARRIOTT RIVE GAUCHE & CONFERENCE CENTER PARIS, FRANCE

BTK revascularisation
technical and clinical challenges
and opportunities

E Ducasse

Unit of Vascular Surgery

Bordeaux

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Disclosure

Speaker name:

Eric DUCASSE

■ I have the following potential conflicts of interest to report:

■ Consulting **Abbott, Bard, Biotronik, Boston-Scientific, Cook, Cordis, Gore, Medtronic**

Employment in industry

Shareholder in a healthcare company

Owner of a healthcare company

Other(s)

I do not have any potential conflict of interest

Main problem in the BTK treatment

- Choice of guide wire
- Choice of support catheter
- Choice of way for recanalisation
- Choice of access
- Choice of balloon
- Choice of stent / stent reconstruction

Presentation

- Only two cases
 - BTK recanalisation and failure
 - Type of wire
 - Role of the support catheter
 - Secondary accesses
 - Angioplasty/type of balloon
 - Popliteal recanalisation and stenting
 - Type of wire
 - Support catheter
 - Angioplasty/stenting

Case 1

- Man 76 years old
- Diabetic status
- Necrotic lesions
- No angiographic previous investigations
- US investigations : BTK disorders

Case 1



Case 1

- Access:
 - Homolateral
 - Direct SFA on thin patients/calciified



Case 1

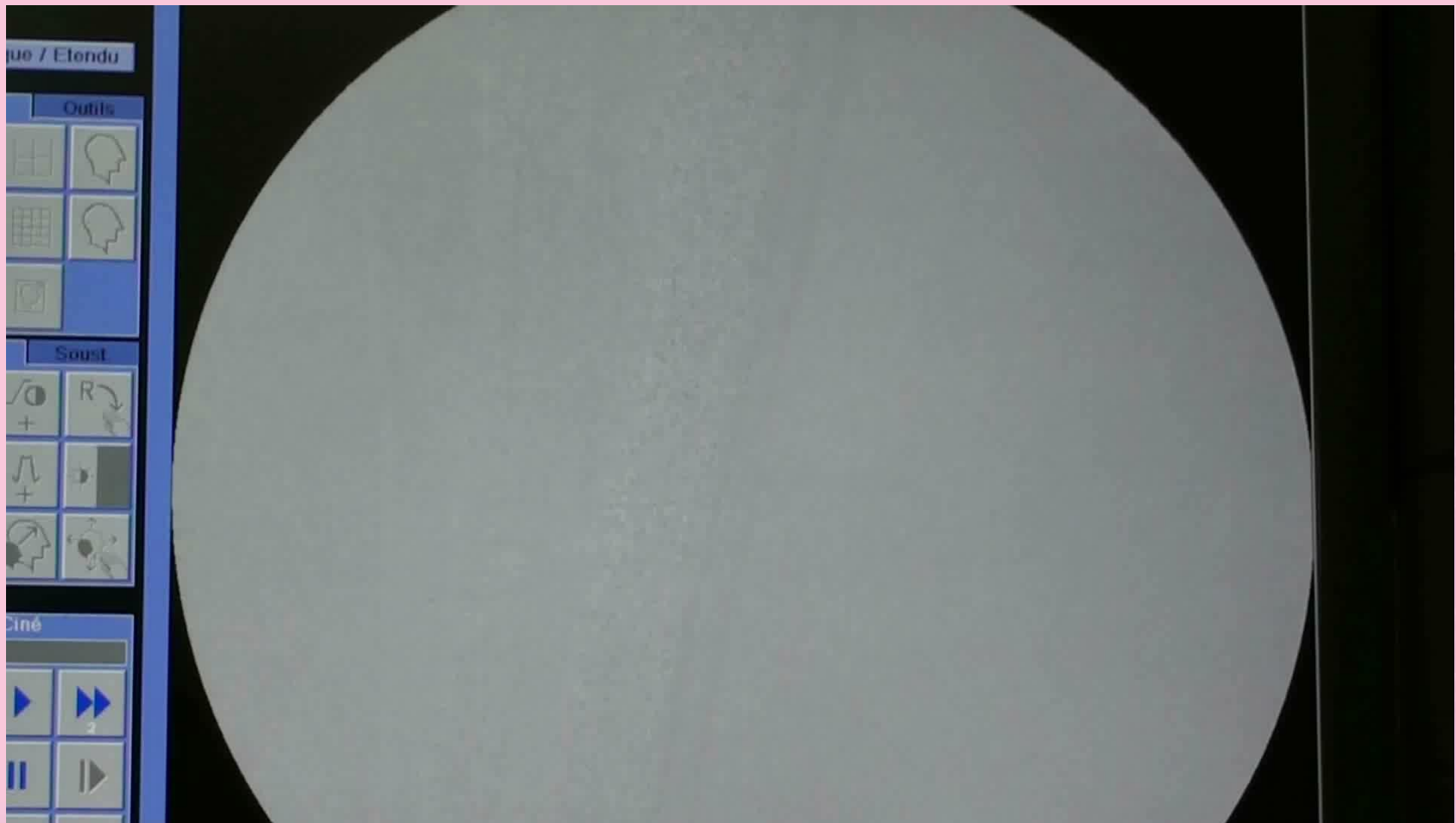
- 4 Fr sheath 45 cm down to the popliteal artery on 0.035'' wire
- BTK treatment start with angiography



Case 1

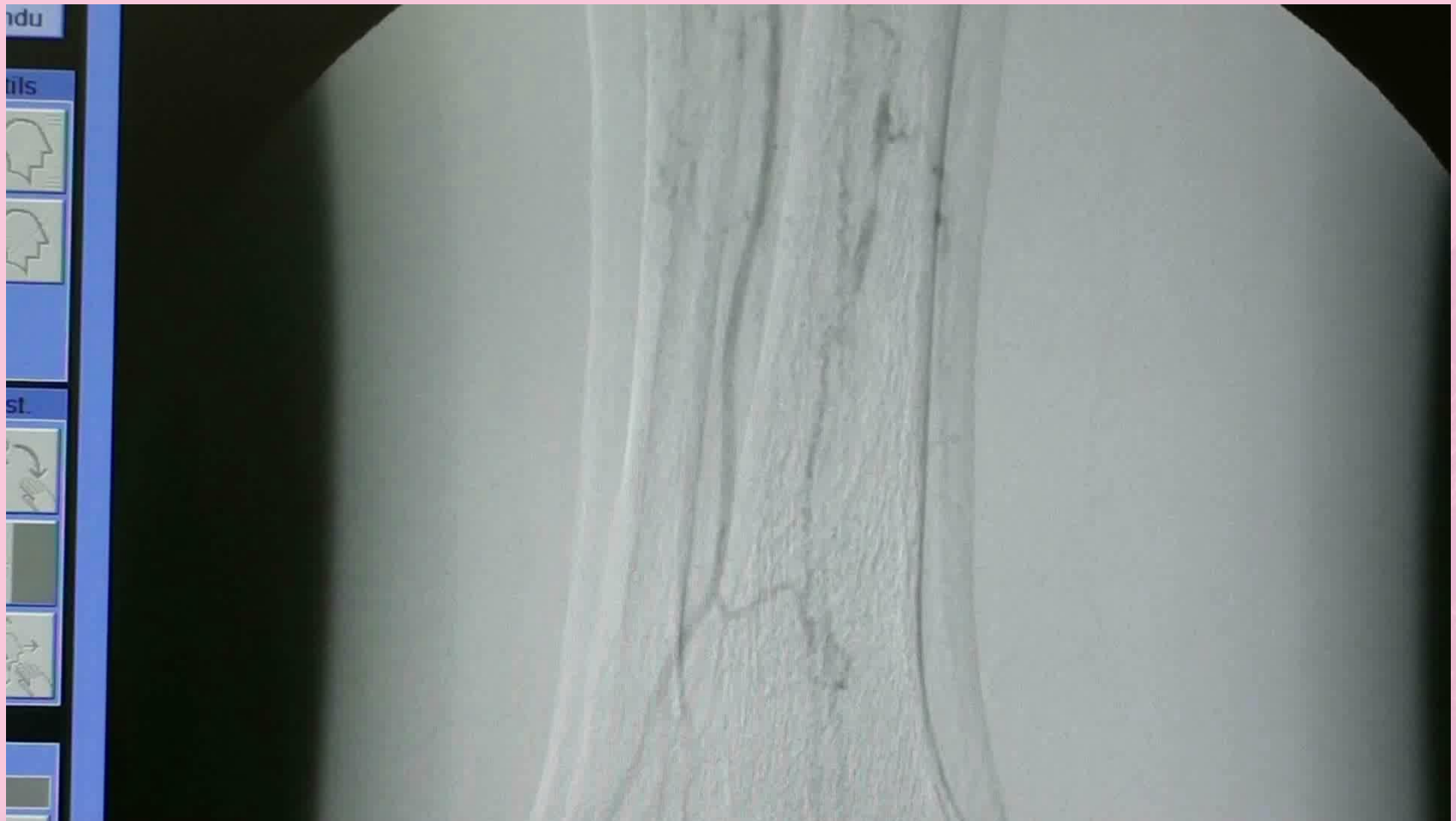


Case 1





Case 1





Case 1

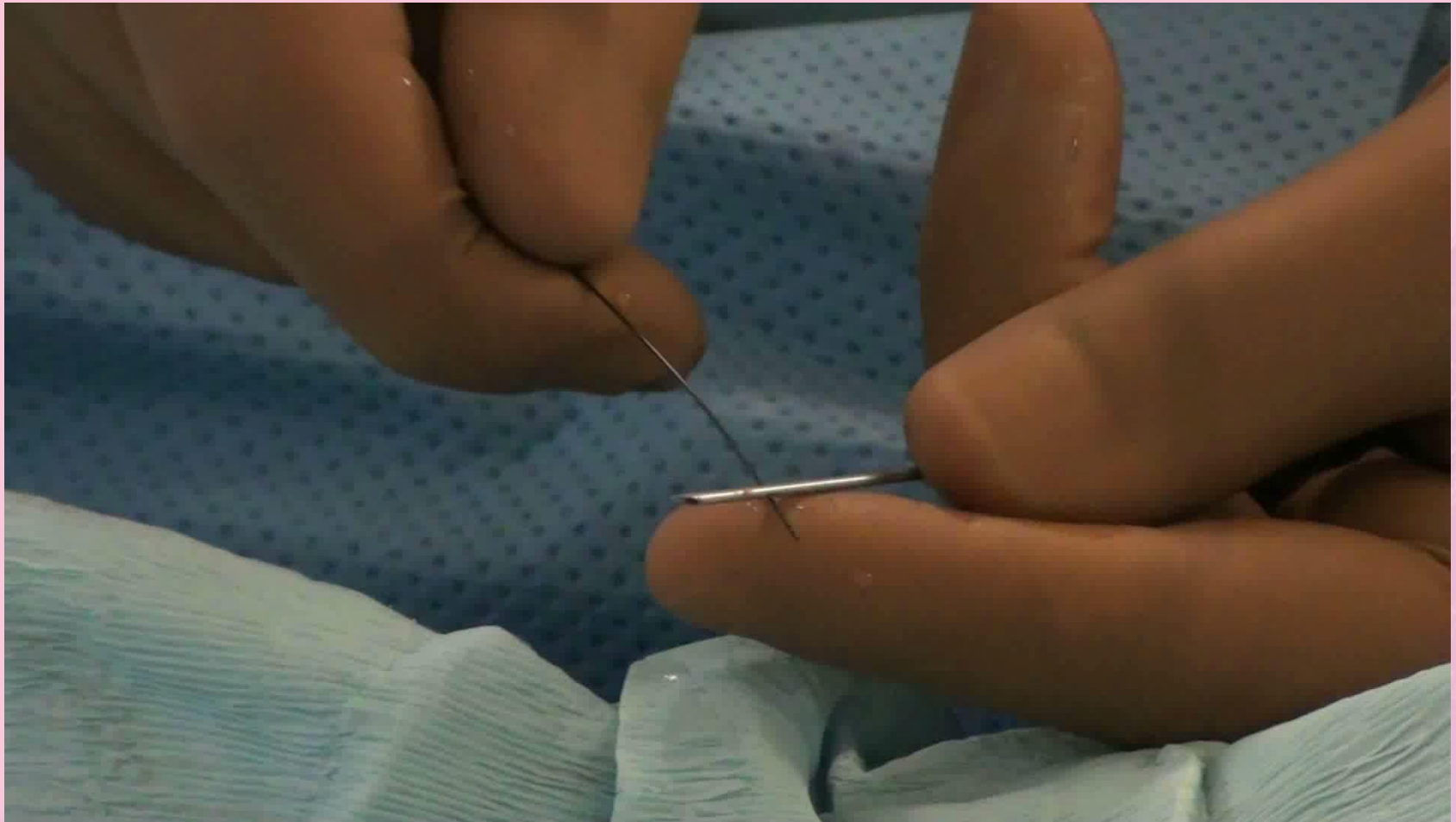


Case 1

- We start the BTK treatment using 0.018" wire
- Perfect mix between crossing (pushability) and navigation (steerability)
- Helped by the support catheter



Case 1



Case 1



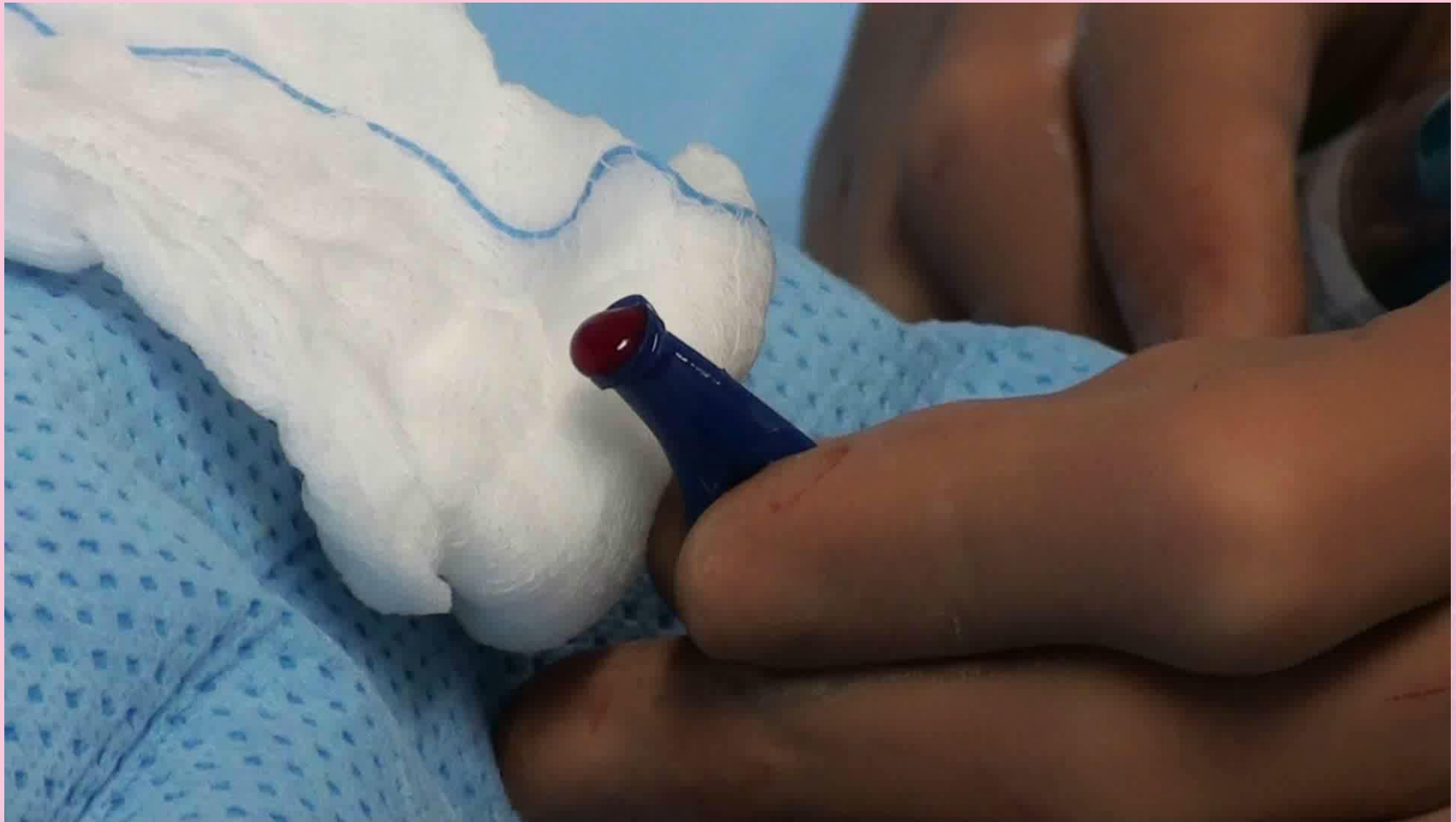
Case 1



Case 1

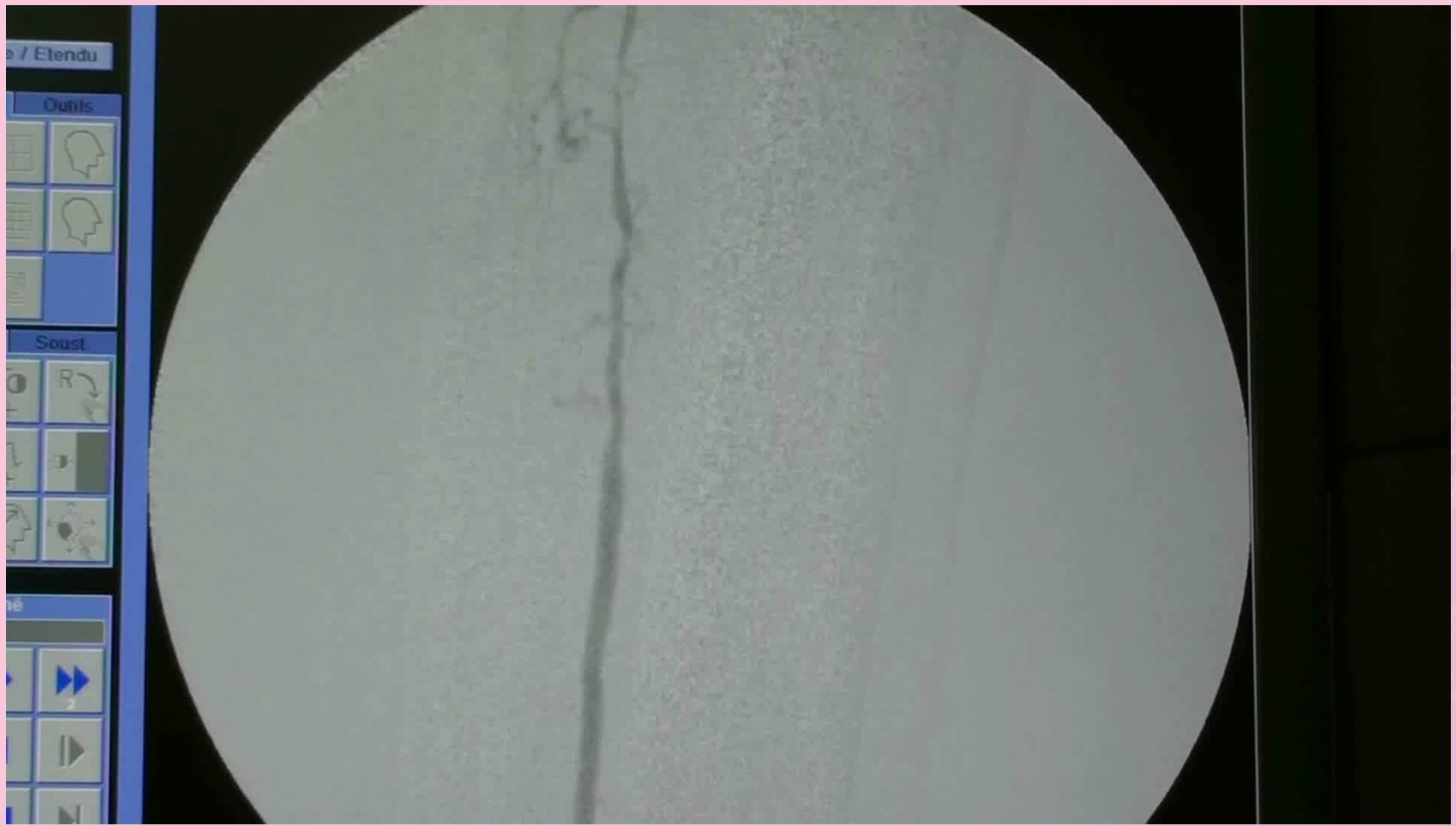
- Important to check during progression
 - To be sure of the progression
 - To change wire
 - To change support
 - To change way
- Use support catheter for contrast injection

Case 1



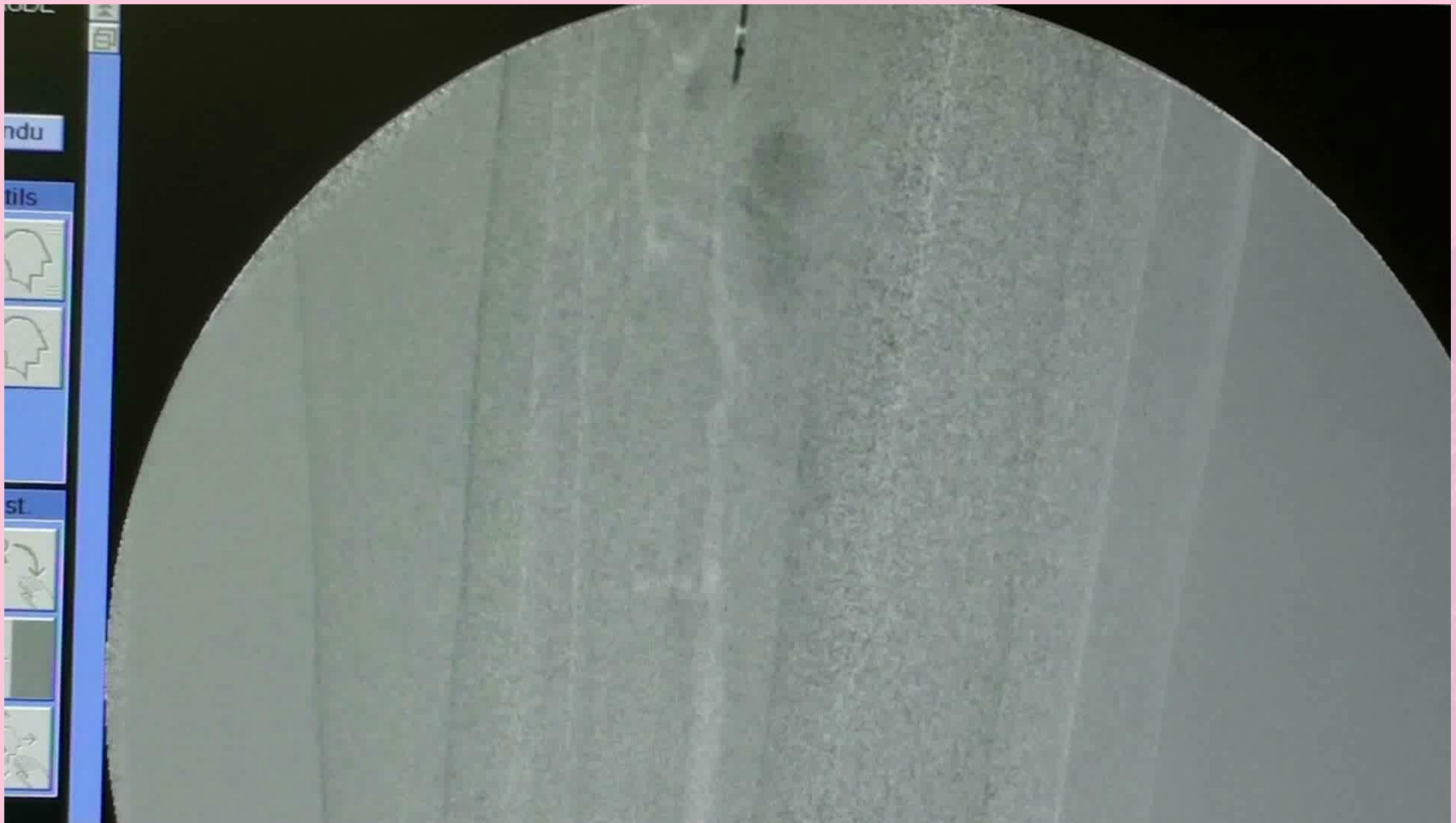


Case 1





Case 1





Case 1

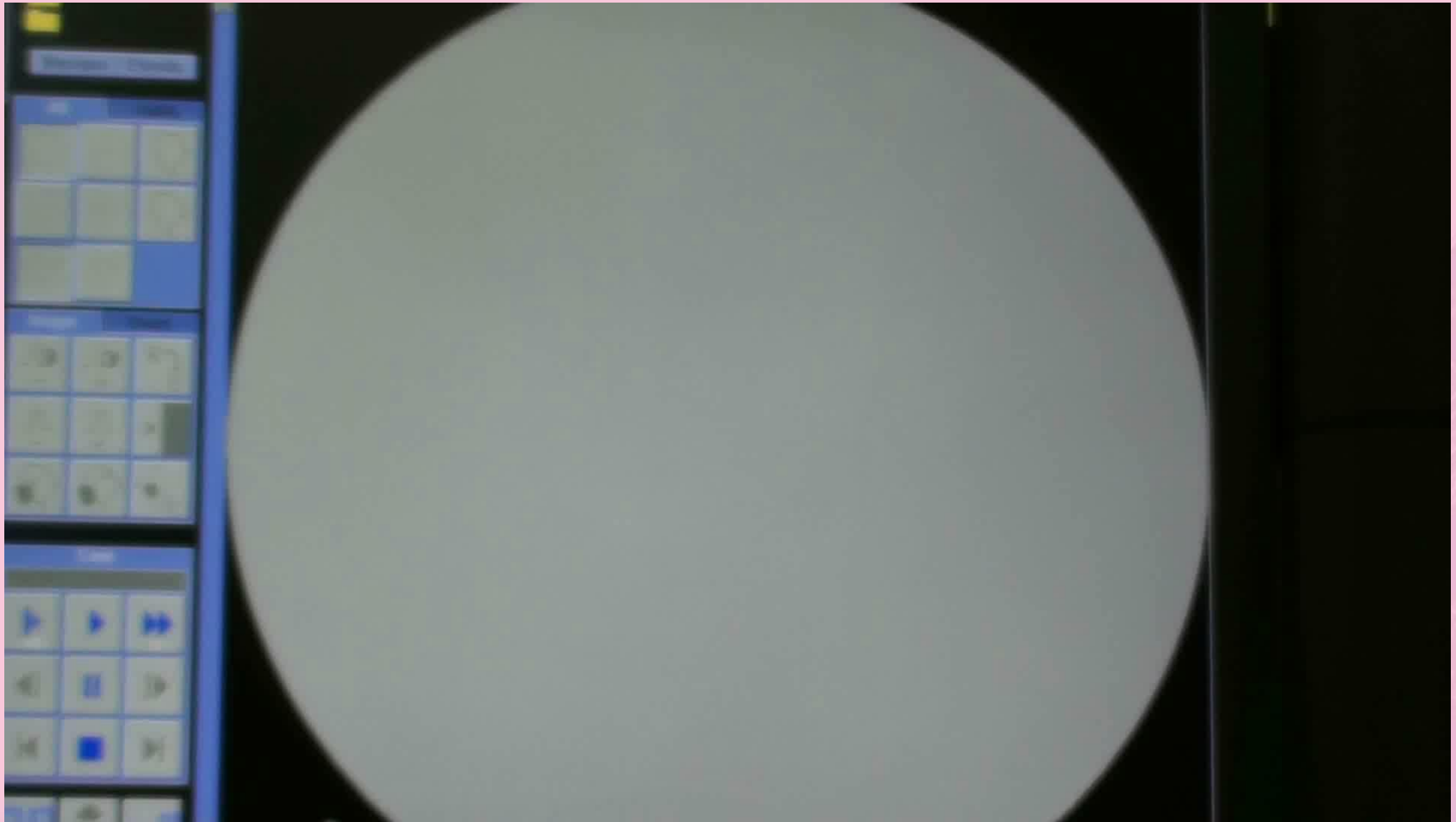


Case 1

- Very important to perfectly feel the progression of the wire and the modification of the wire pushability accordingly to the fluoroscopic aspect (Tip + proximal shaft)
- If any doubt: control

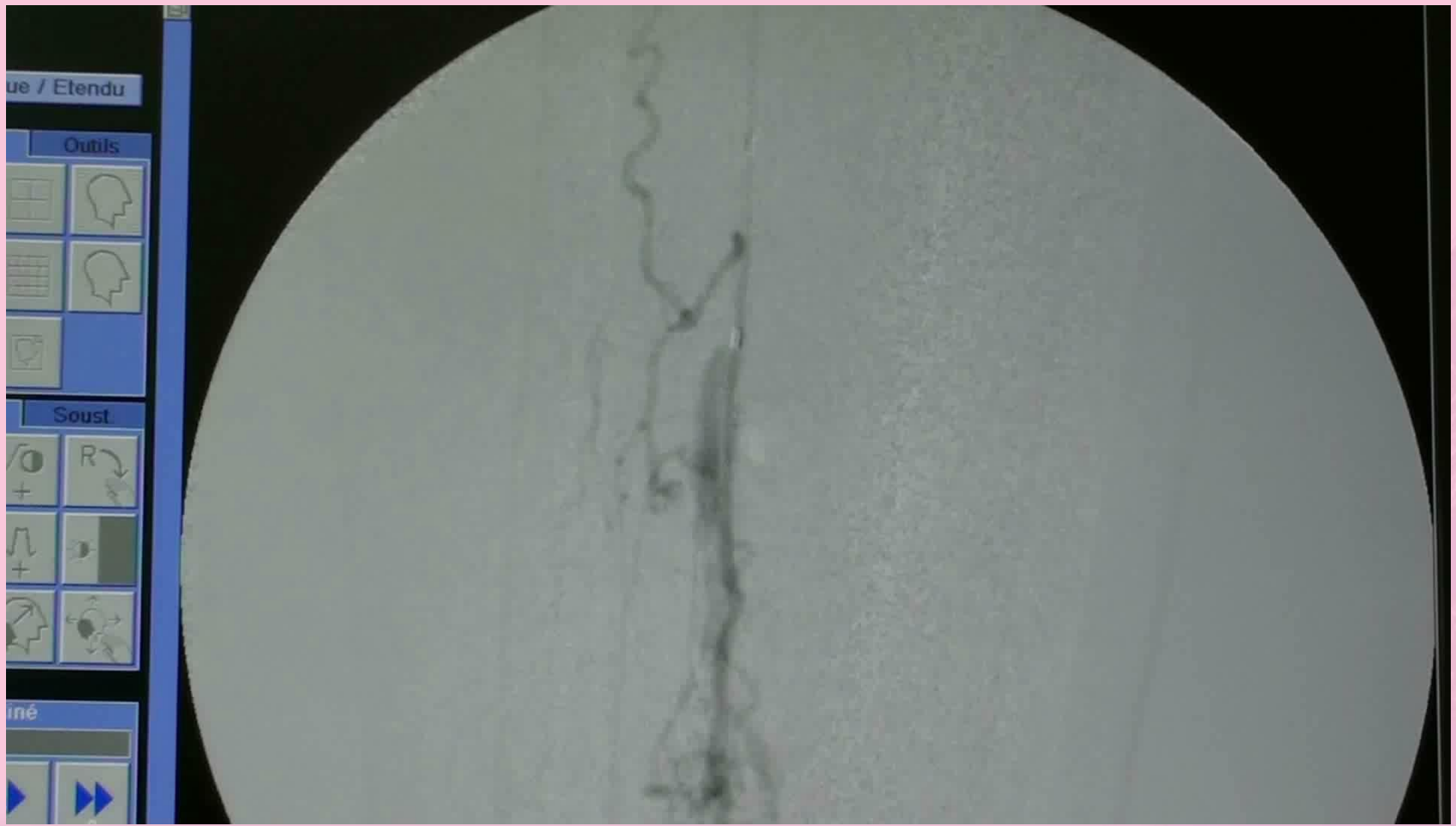


Case 1





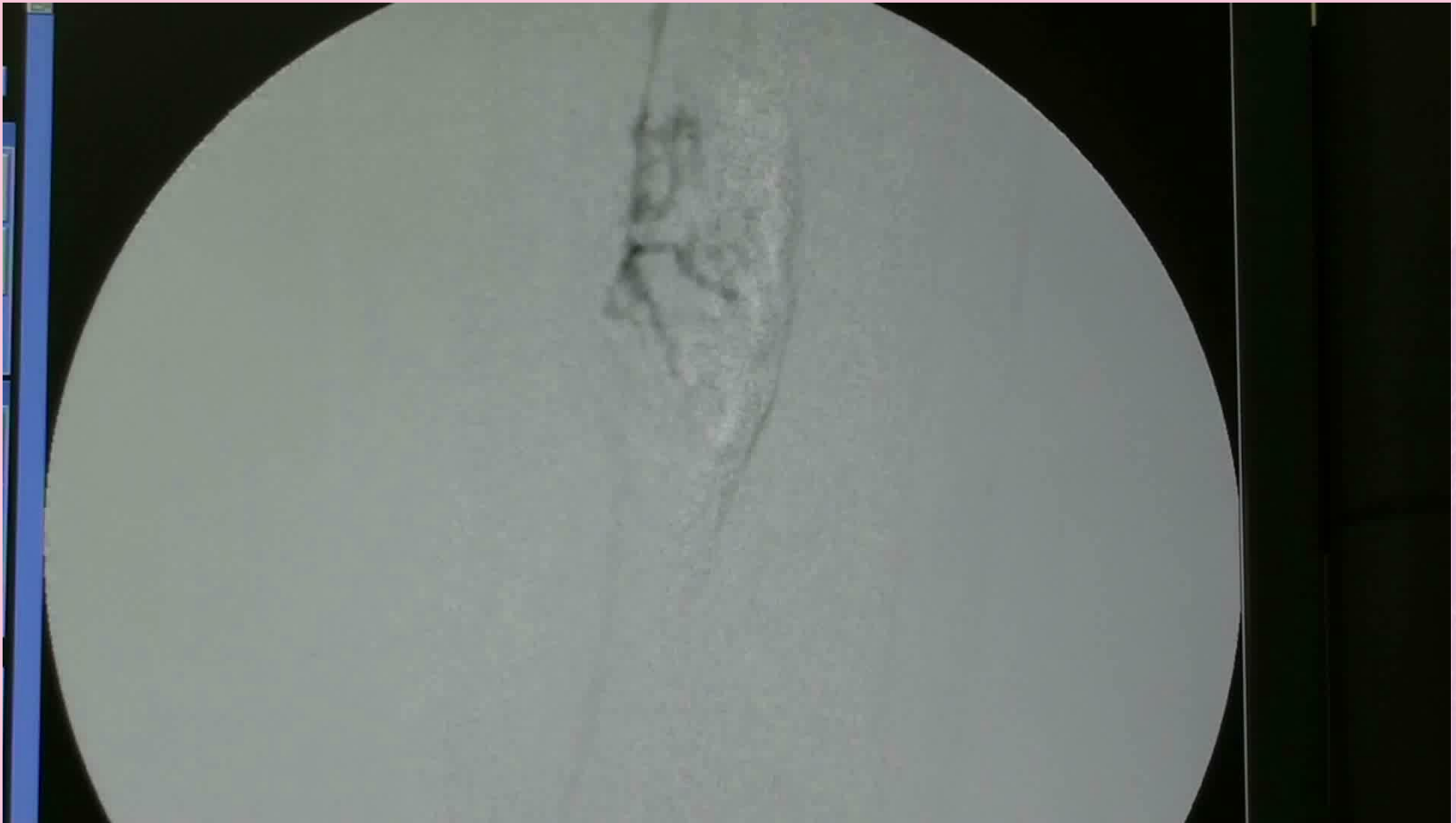
Case 1



Case 1

- In case of perforation:
 - Check where is the culprit lesion/perforation
 - Check if distal artery is still connected

Case 1



Case 1



Case 1

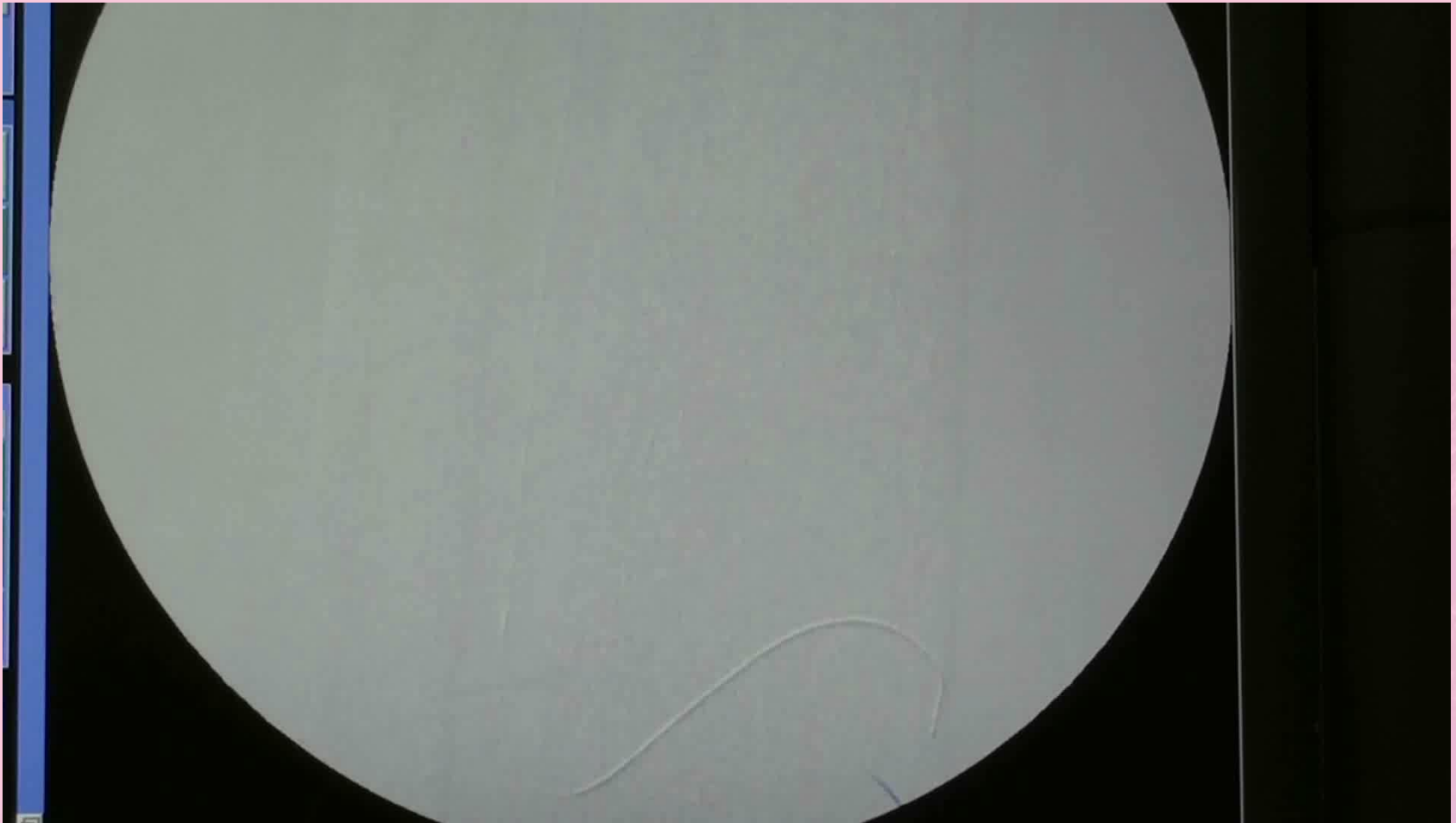
- In case of perforation:
 - Usually the same wire with the same tip angulation leads to the same consequences
 - No hesitation for changing the wire



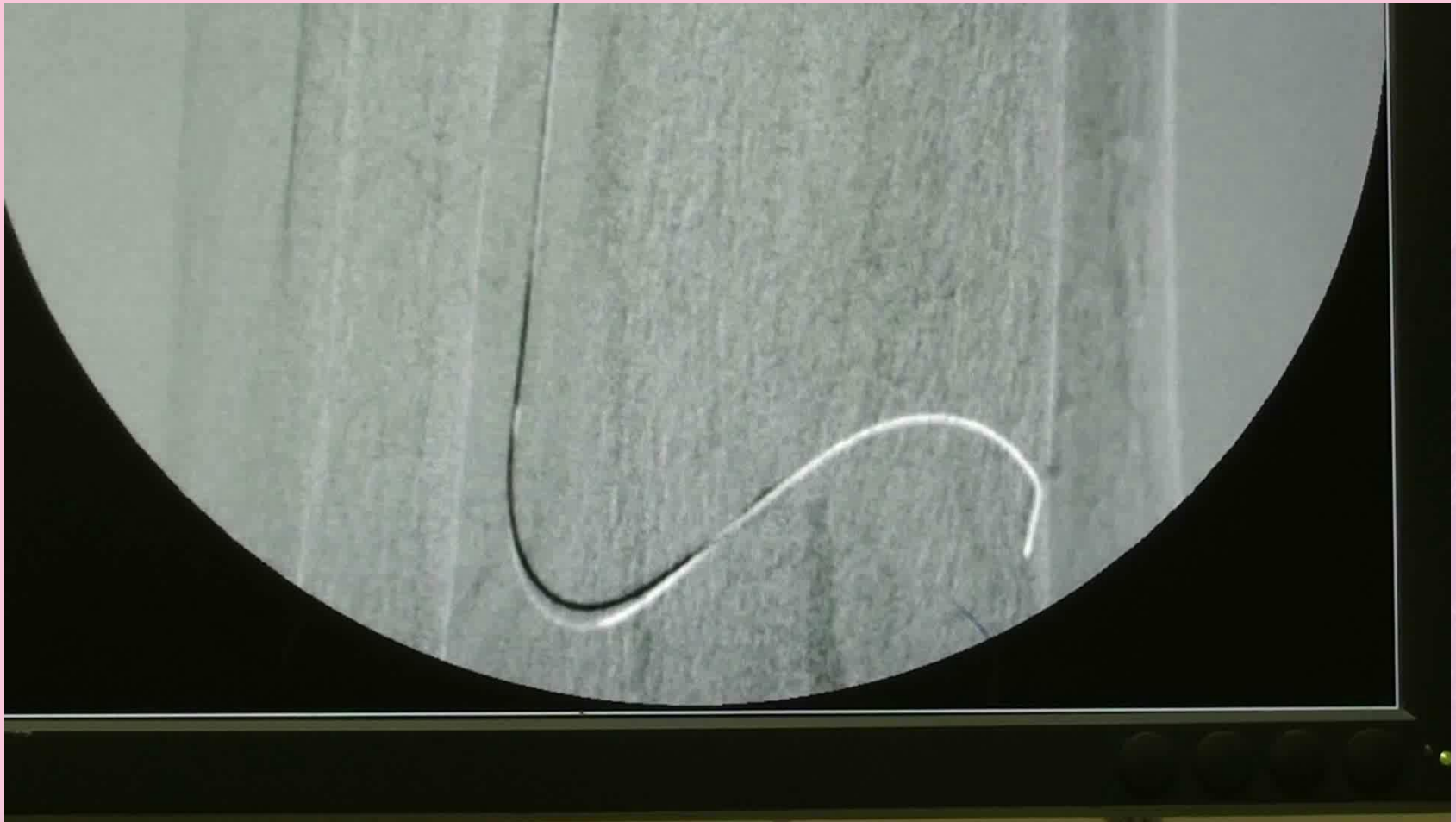
Case 1



Case 1



Case 1





Case 1

Coyote™

MONORAIL™

4F

PTA Balloon Dilatation Catheter

atm - kPa Pressure		2.5mm Balloon
3.0 - 304		2.21
4.0 - 405		2.27
5.0 - 507		2.32
6.0 - 608		2.38
7.0 - 709		2.43
8.0 - 811	NOMINAL	2.47
9.0 - 912		2.51
10.0 - 1013		2.55
11.0 - 1115		2.58
12.0 - 1216		2.61
13.0 - 1317		2.64
14.0 - 1419	RATED*	2.67

***Rated Burst Pressure. DO NOT EXCEED**



Case 1

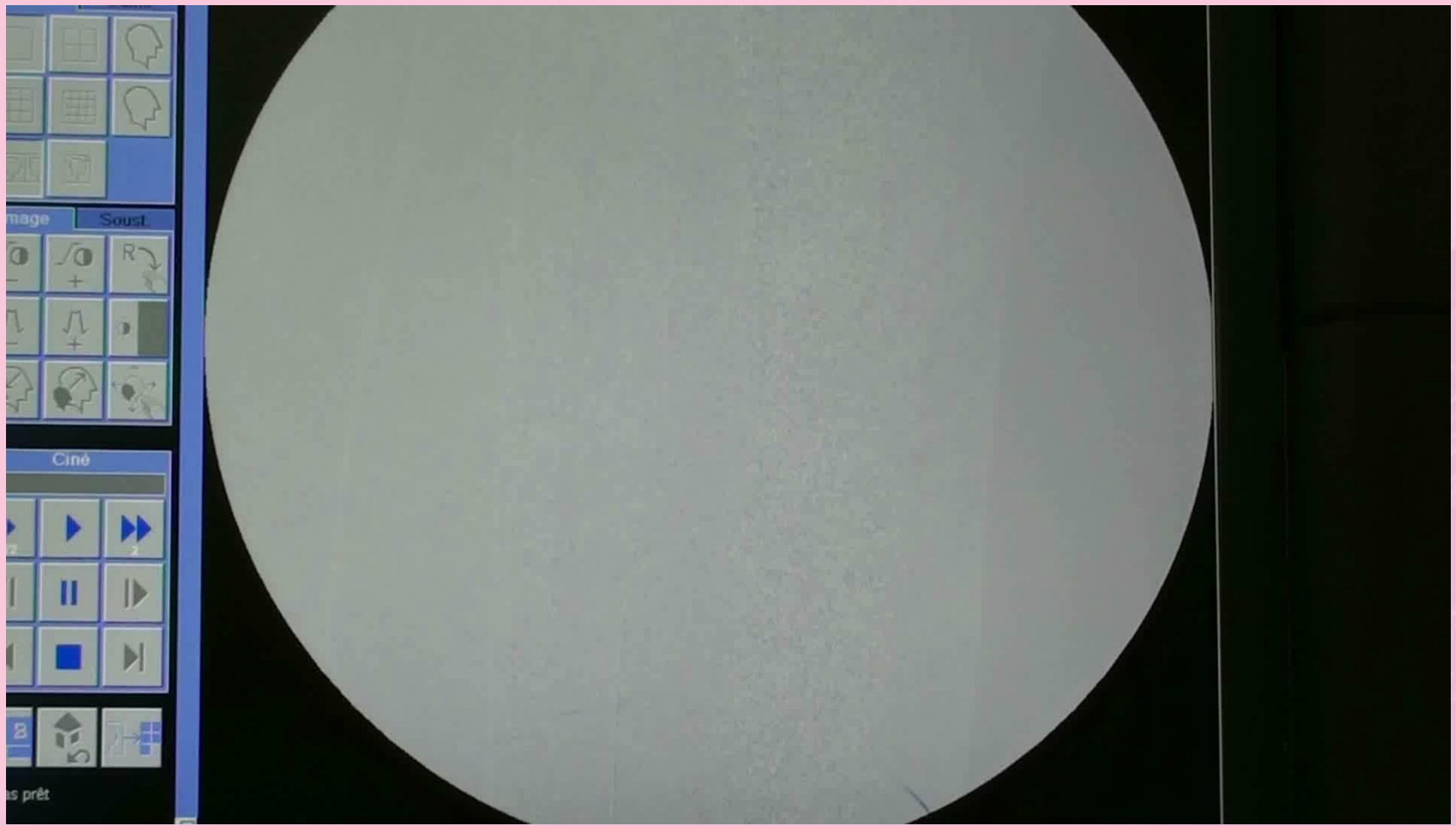


Case 1





Case 1

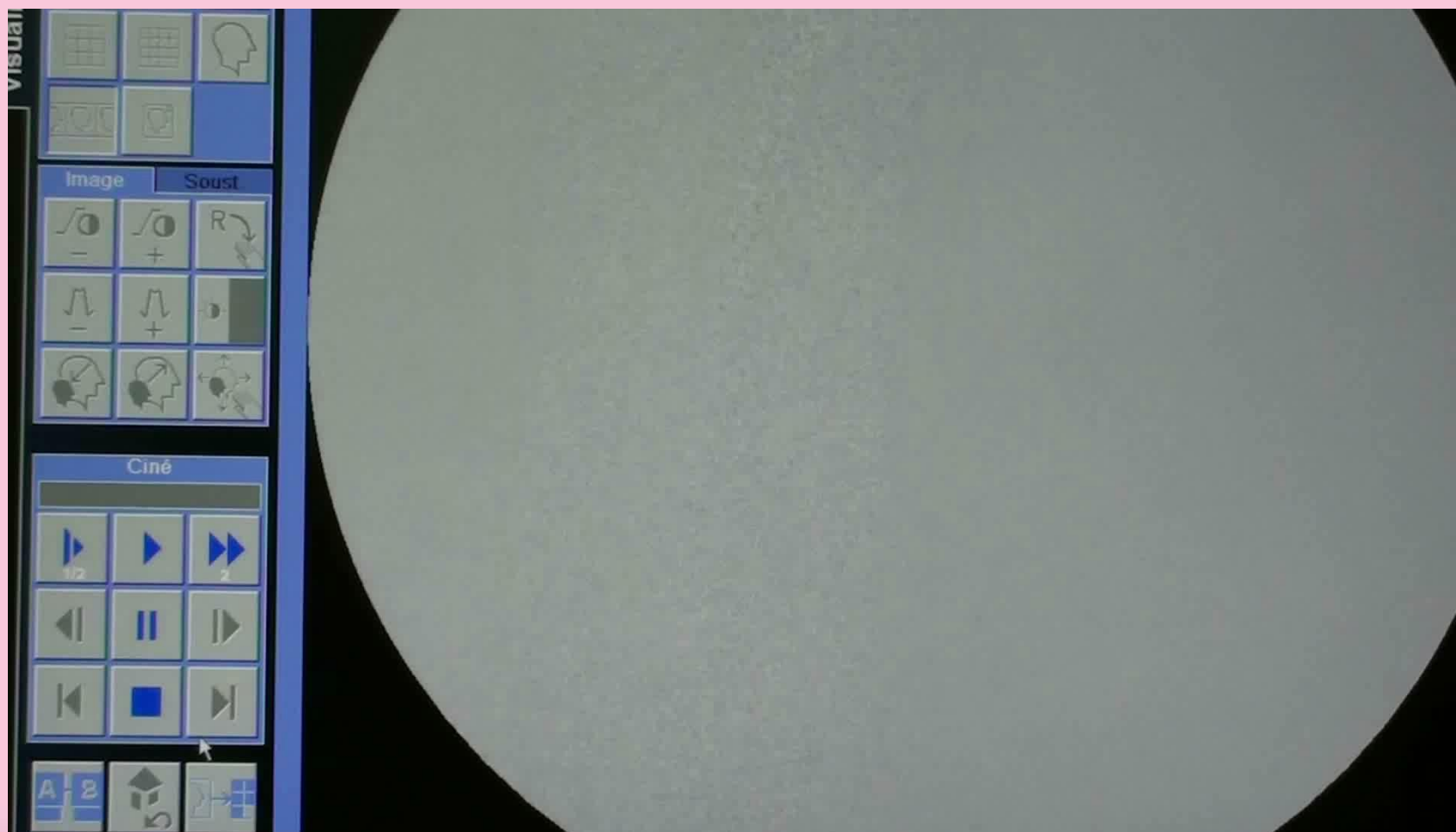


Case 1





Case 1



Case 1

- Happy ending....of course
- Technical aspects
 - One ponction
 - One sheath
 - One perforation
 - Two support catheters
 - Two guidewires
 - One balloon
 - One good result

Case 2

- Man 71 years old
- Diabetic status – hypertension – tobacco use
- Rest pain + recent distal necrotic lesion on toes
- angioMRA 3 years before with short and focal lesion on popliteal artery, only one peroneal artery patent
- Recent US investigation with popliteal + BTK disorders



Case 2





Case 2

BEAUFOUR Raymond
68 ans M 00441436
Acc: 0909170075
17/09/2009

MobiView
513x1468
MR

Mag: 0.82x

Ad

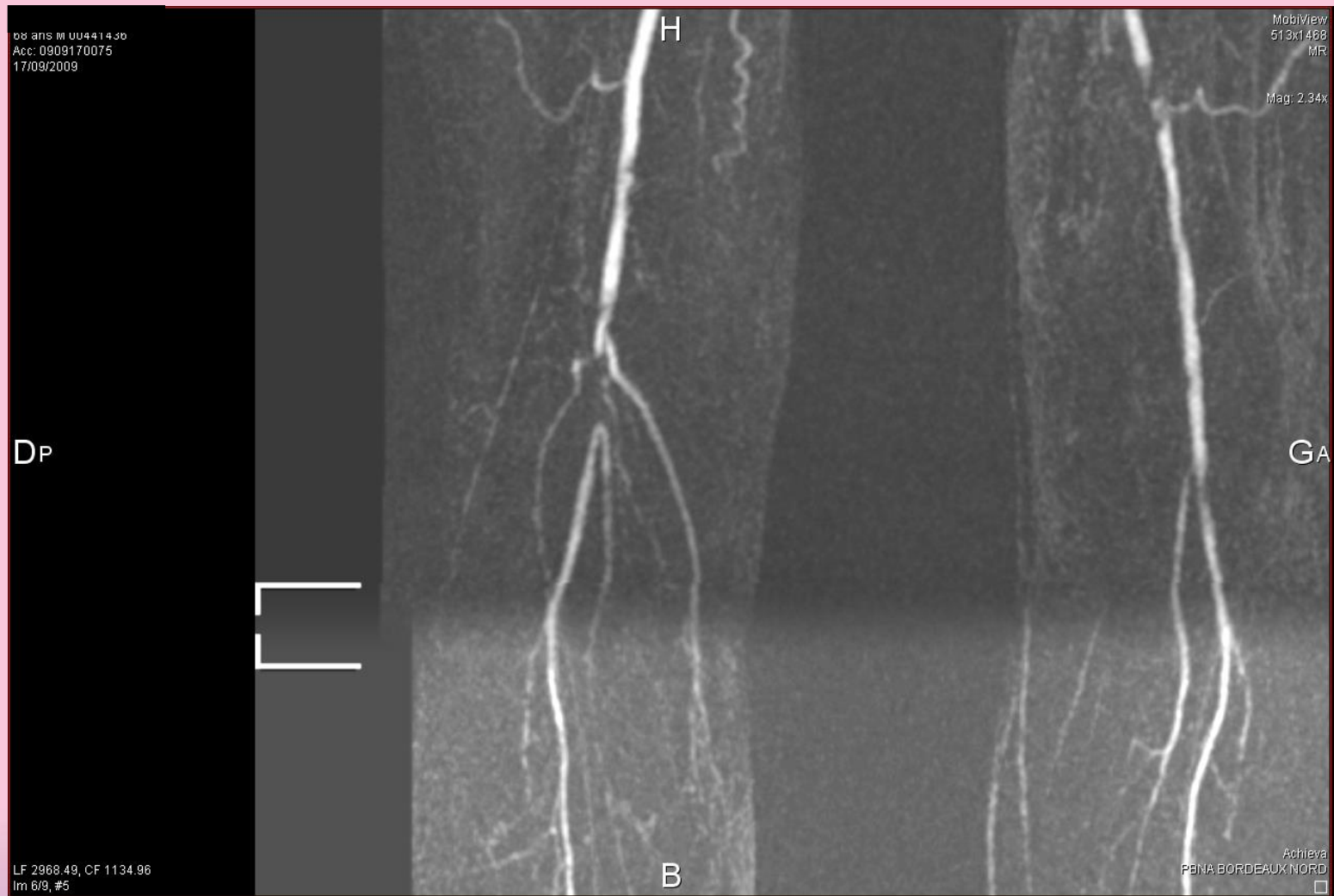
Pg

LF 2968.49, CF 1134.96
Im 1/9, #9

Achieva
PBNA BORDEAUX NORD



Case 2





Case 2

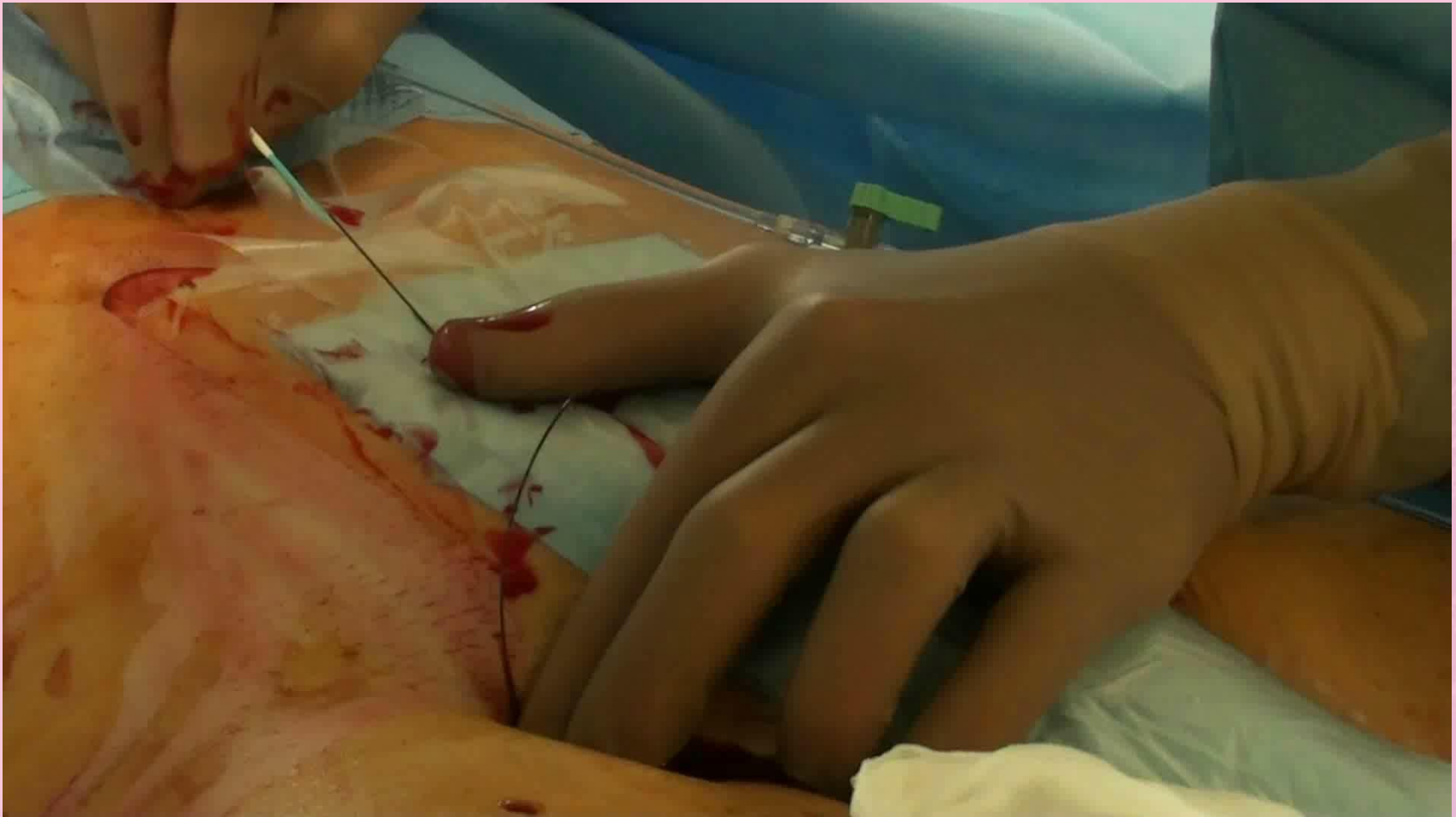


Case 2





Case 2



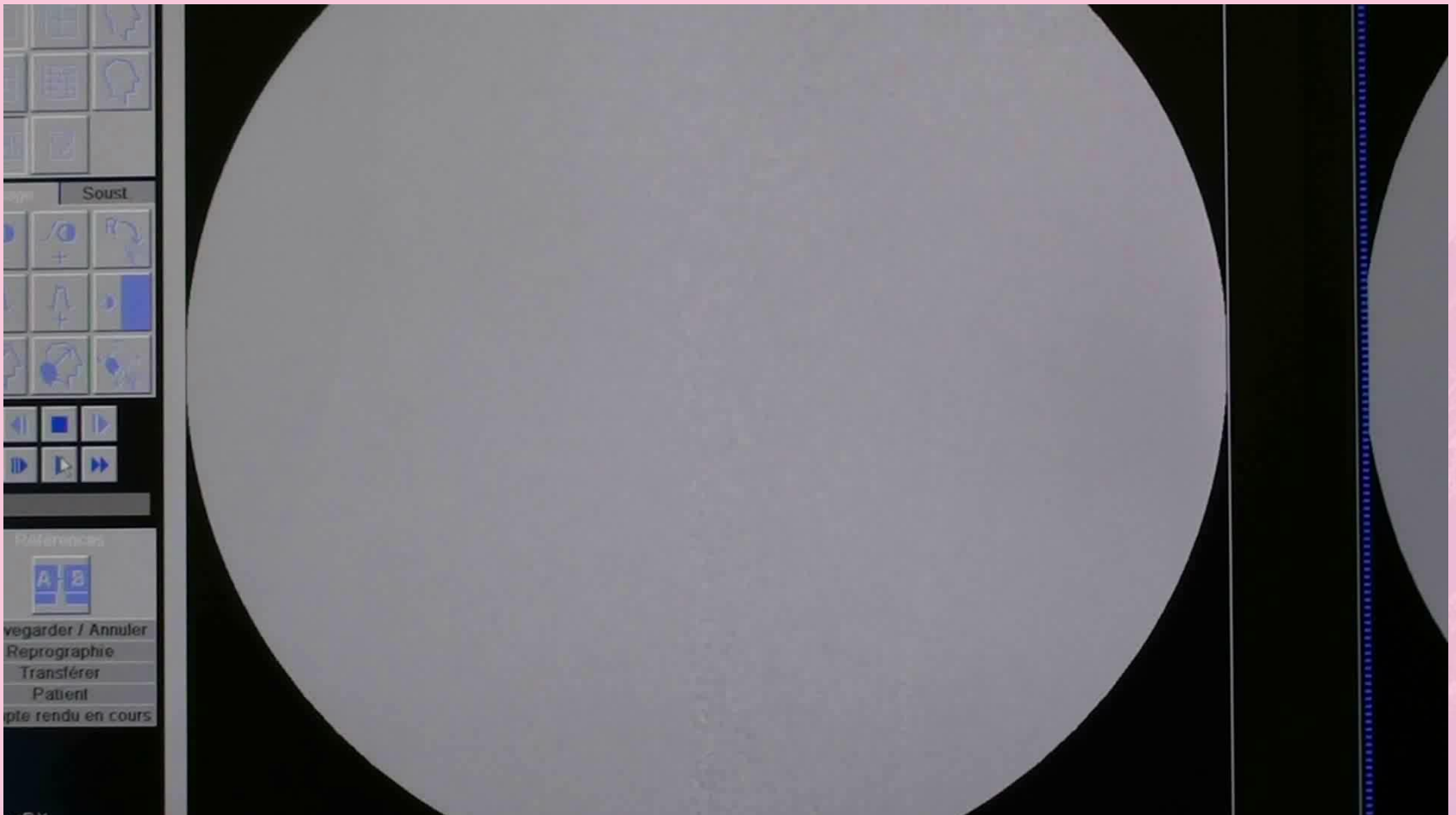


Case 2





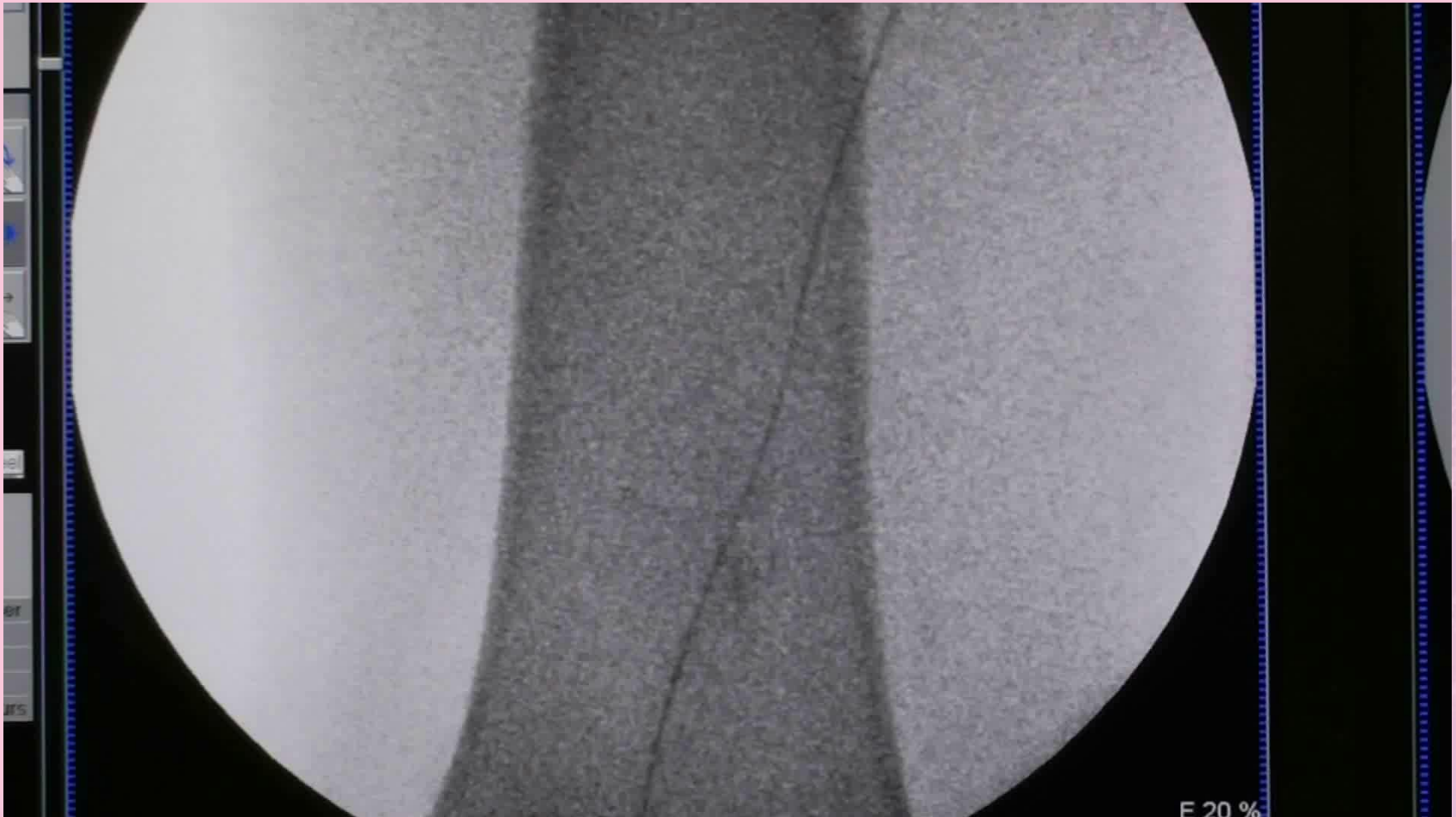
Case 2



Case 2

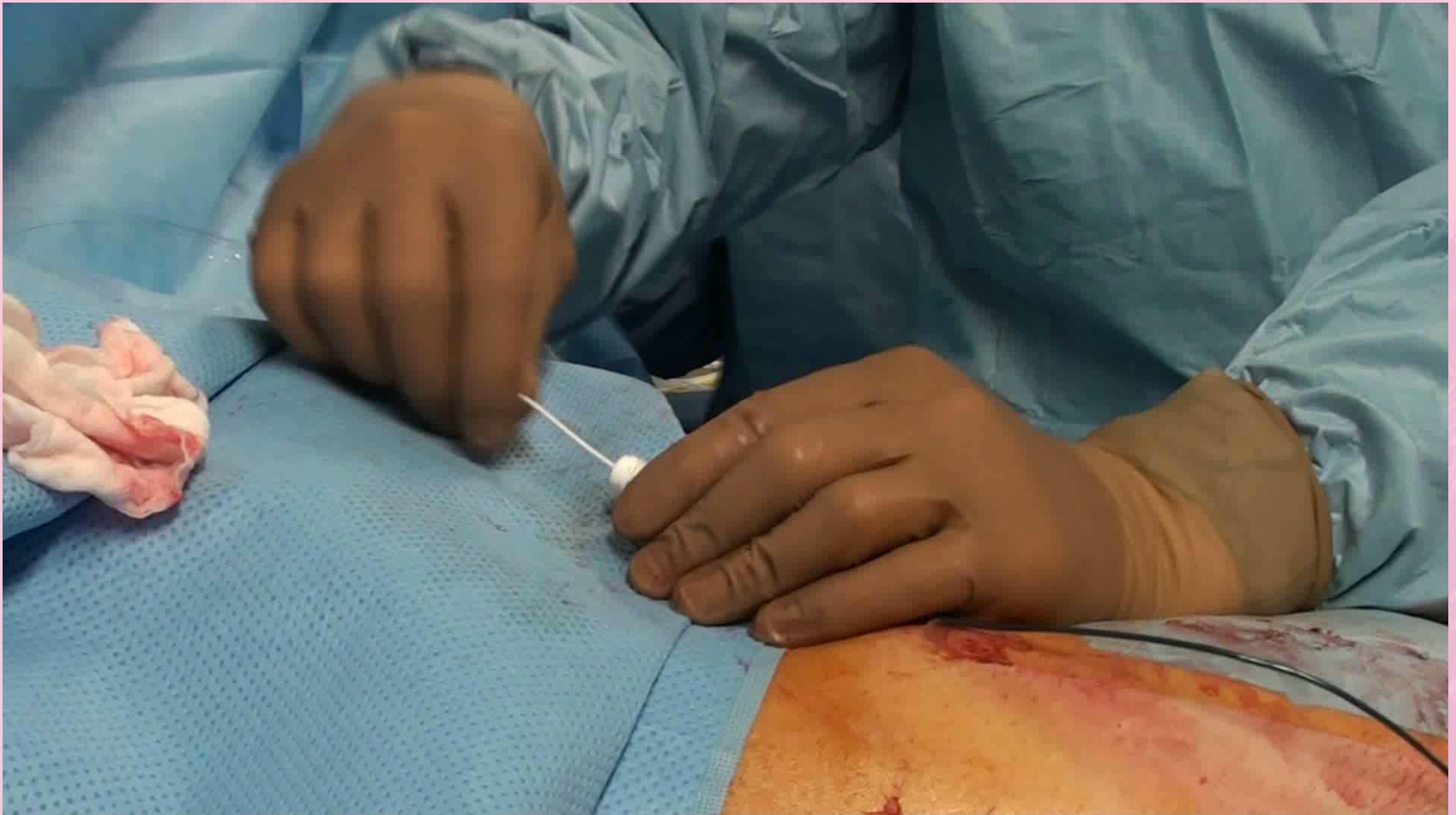


Case 2





Case 2



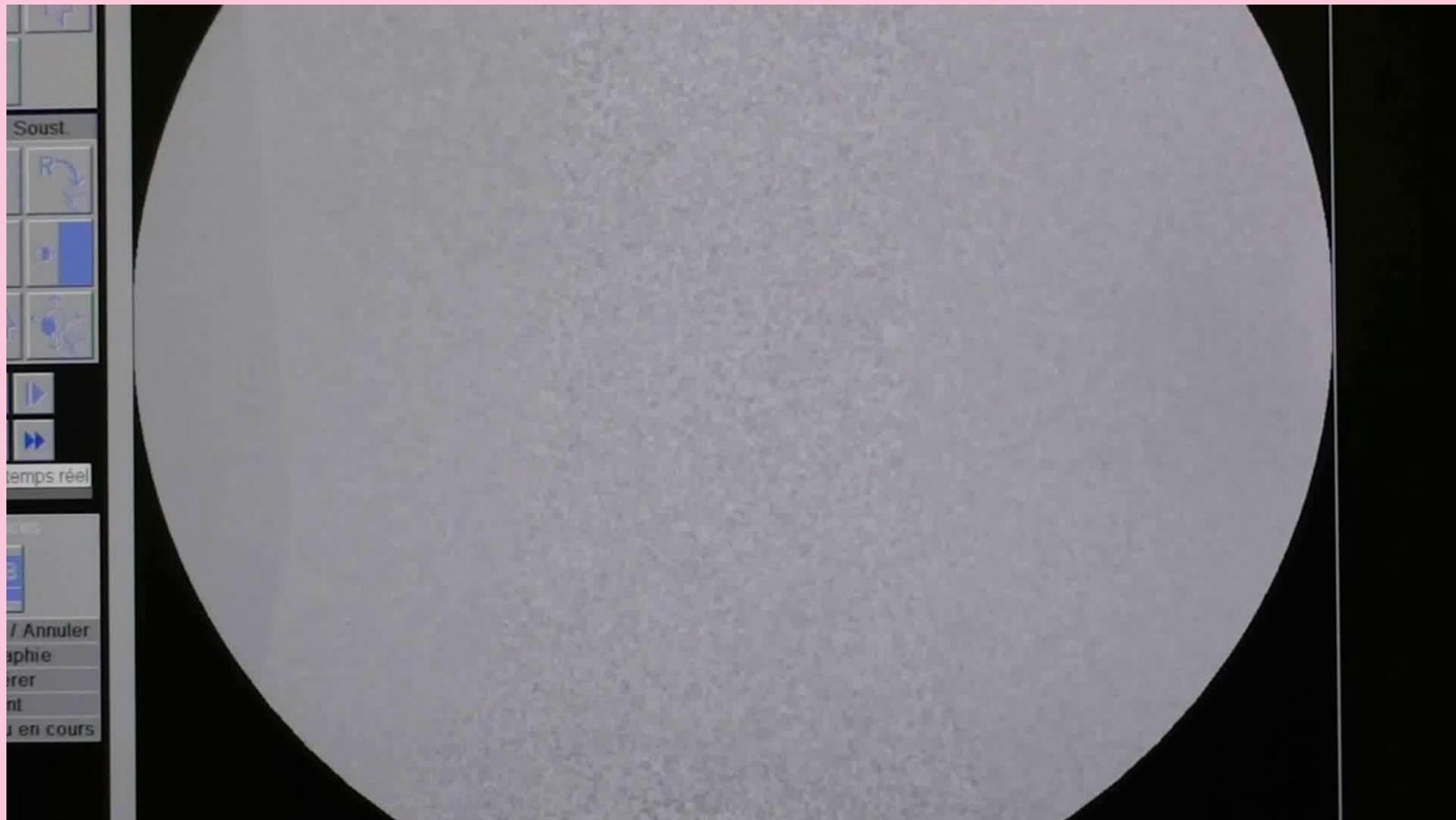


Case 2



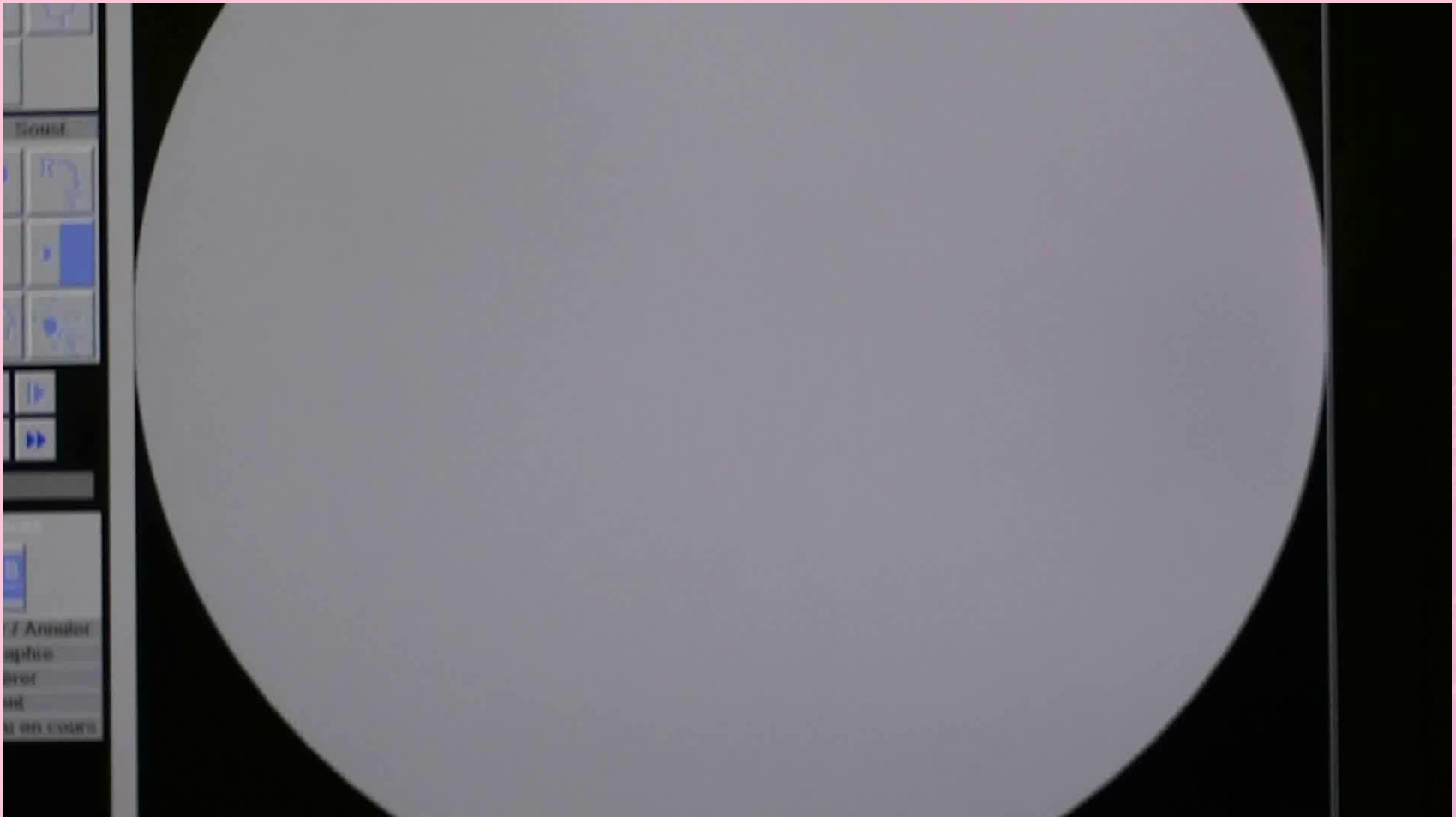


Case 2

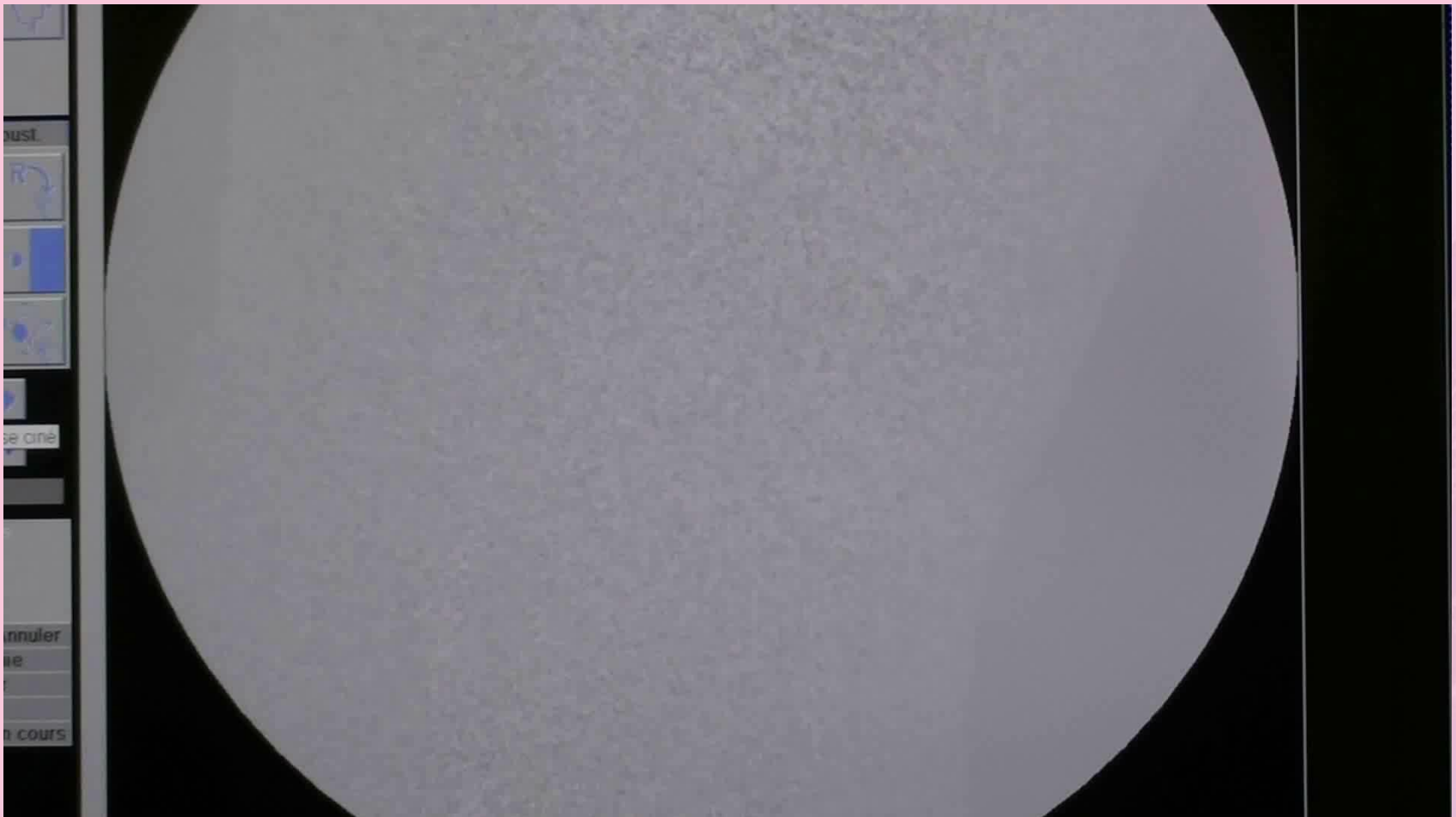




Case 2

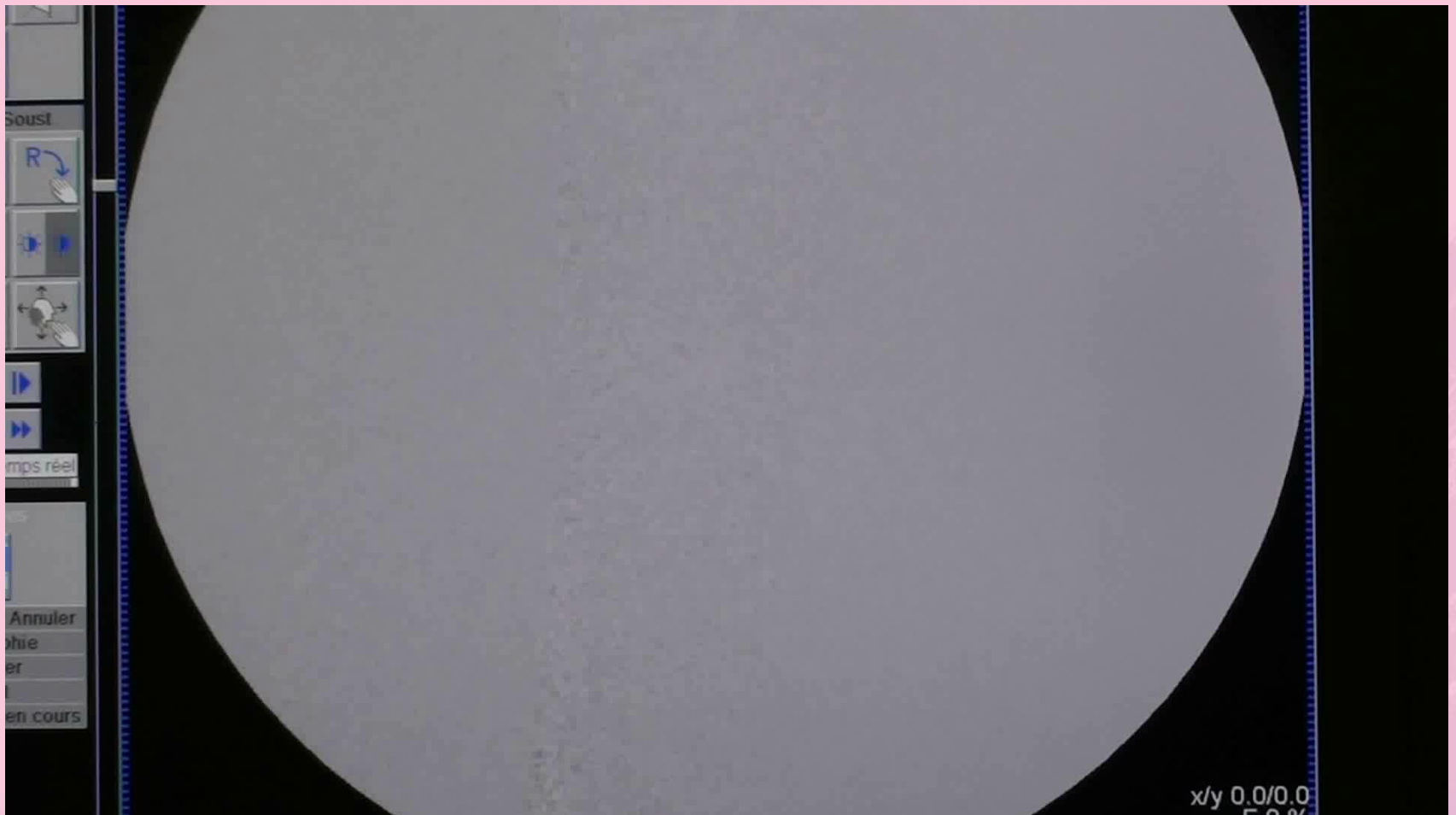


Case 2



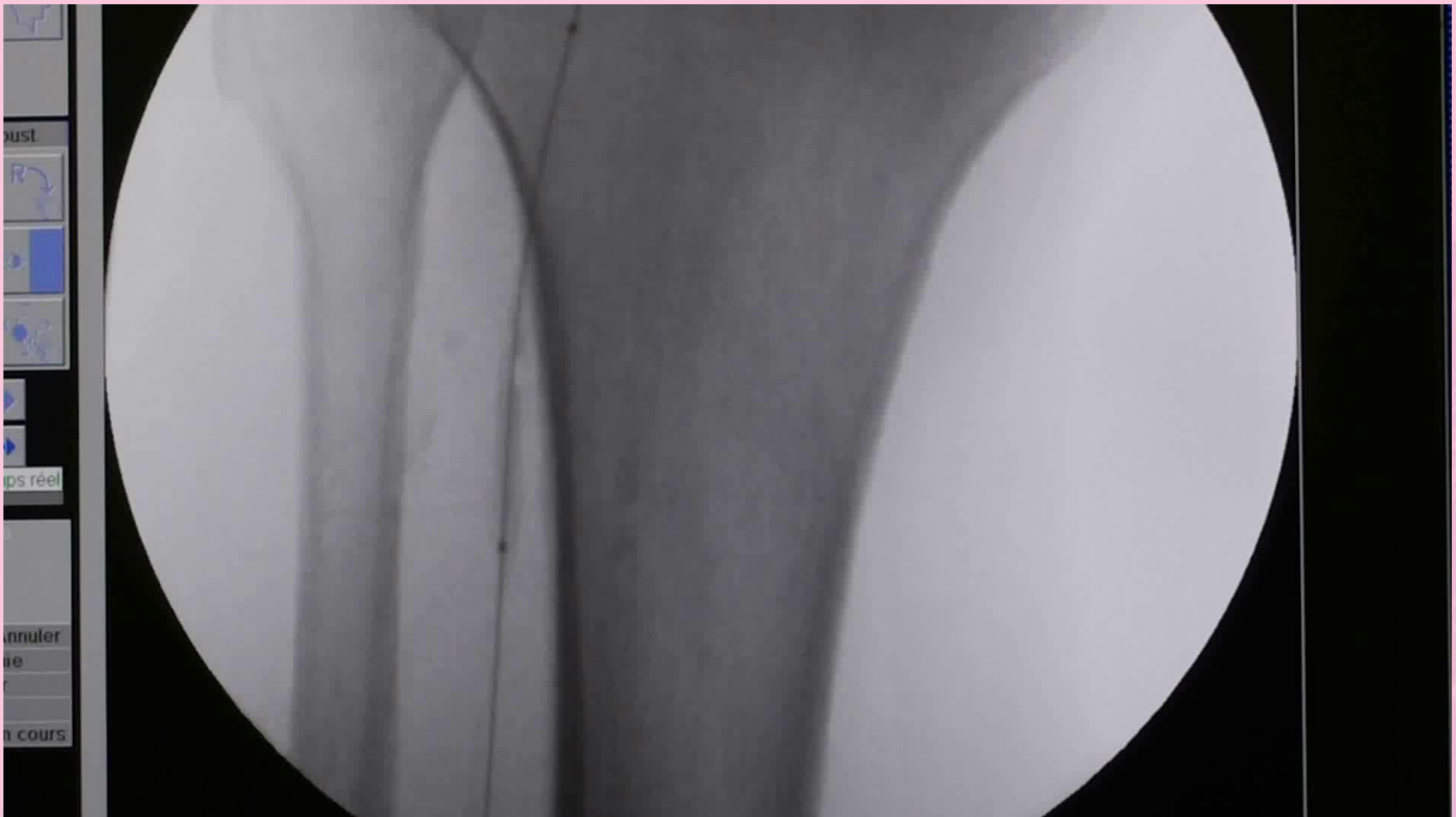


Case 2





Case 2





Case 2



Case 2



Case 2

- Stenting mandatory
 - On 0.018” dedicated stent
 - SES
 - 5 mm diameter – 120 mm length
- Angioplasty post-stenting + control

Case 2



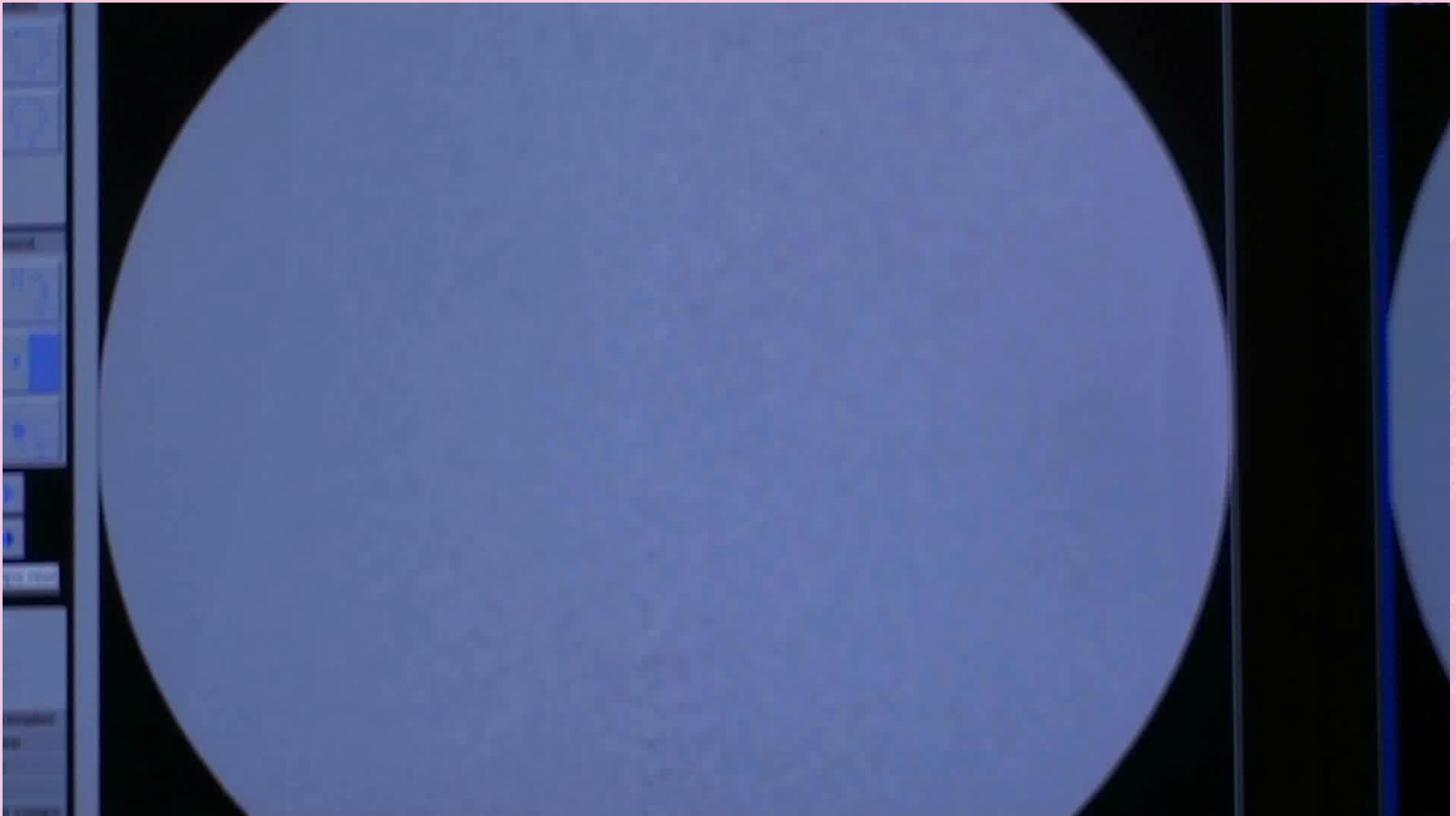
Case 2

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Case 2



Conclusion

- Devices are crucial
- Couple wire-support catheter
- Angioplasty / place for scoring-cutting-DEB ?
- Stenting sometimes necessary
- A perfect connexion between two tubes
 - Wire crossing the lesion
 - No fear for exotic access