

SFA

Retrograde recanalisation

E Ducasse

Unit of vascular surgery

Bordeaux

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WHY ?

- Rescue technique in some indications
 - Impossibility to re-entry distally
 - Impossibility for antegrade access
 - No contralateral way/obesity
 - Any proximal SFA

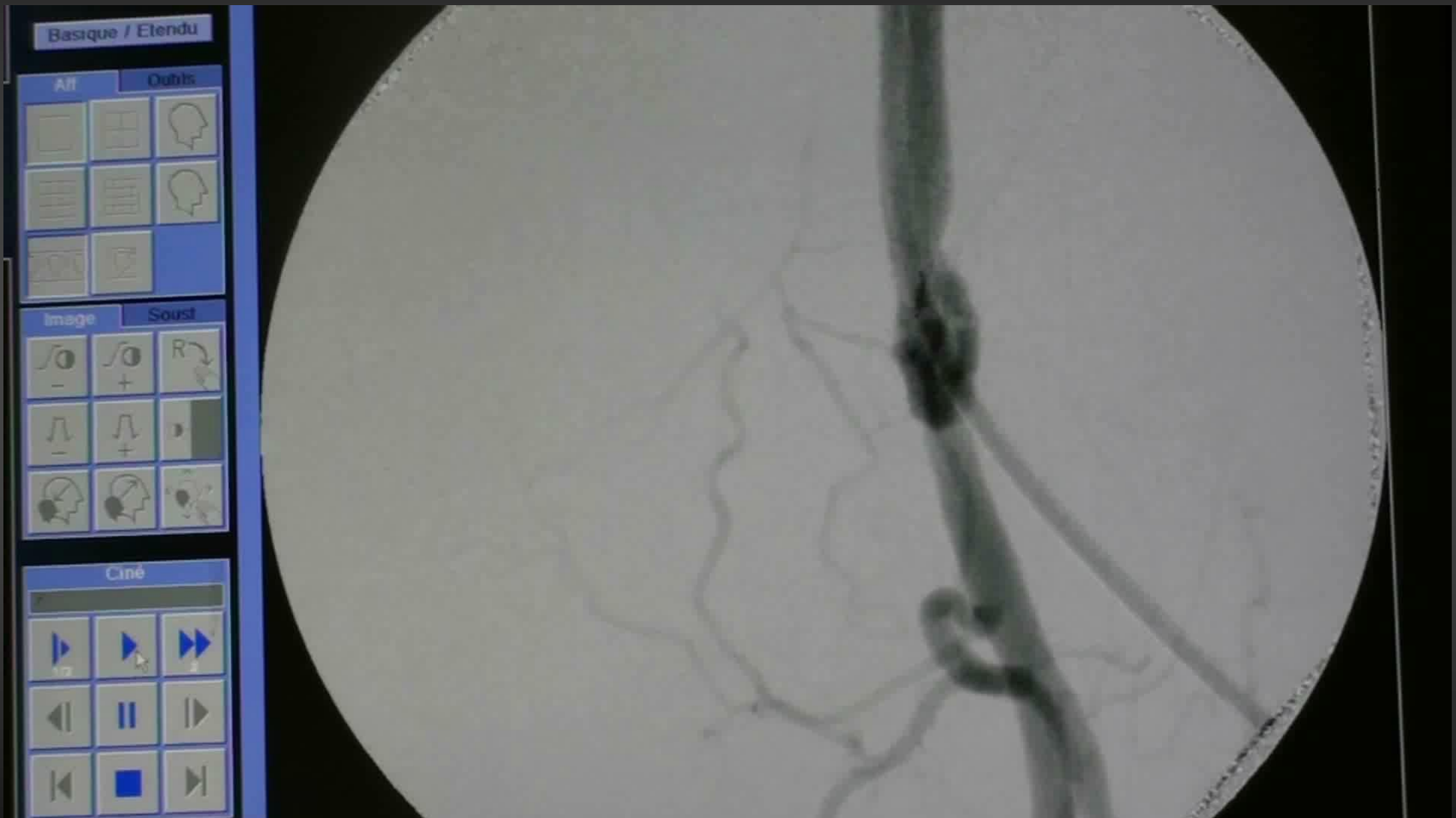
QUESTIONS and limiting factors

- Puncture ?
 - Any adapted device
 - Limiting factor: obese patient
 - When use a sheath ?
- Recanalisation ?
- Re-entry ?
 - Necessary to target the re-entry
 - « Rendez-vous » technique
 - Previous surgery at CFA
- Hemostasis at the puncture site ?
 - Never necessary / balloon inflation after sheath retrieval

METHOD - PUNCTION

- A 7 to 15 cm, 21-G needle
 - Support needle
 - Radioprotective gloves
- Moderate knee flexion
- Road-mapping / fluoroscopy guidance on calcifications
- Reflux / wire progression

EXAMPLE

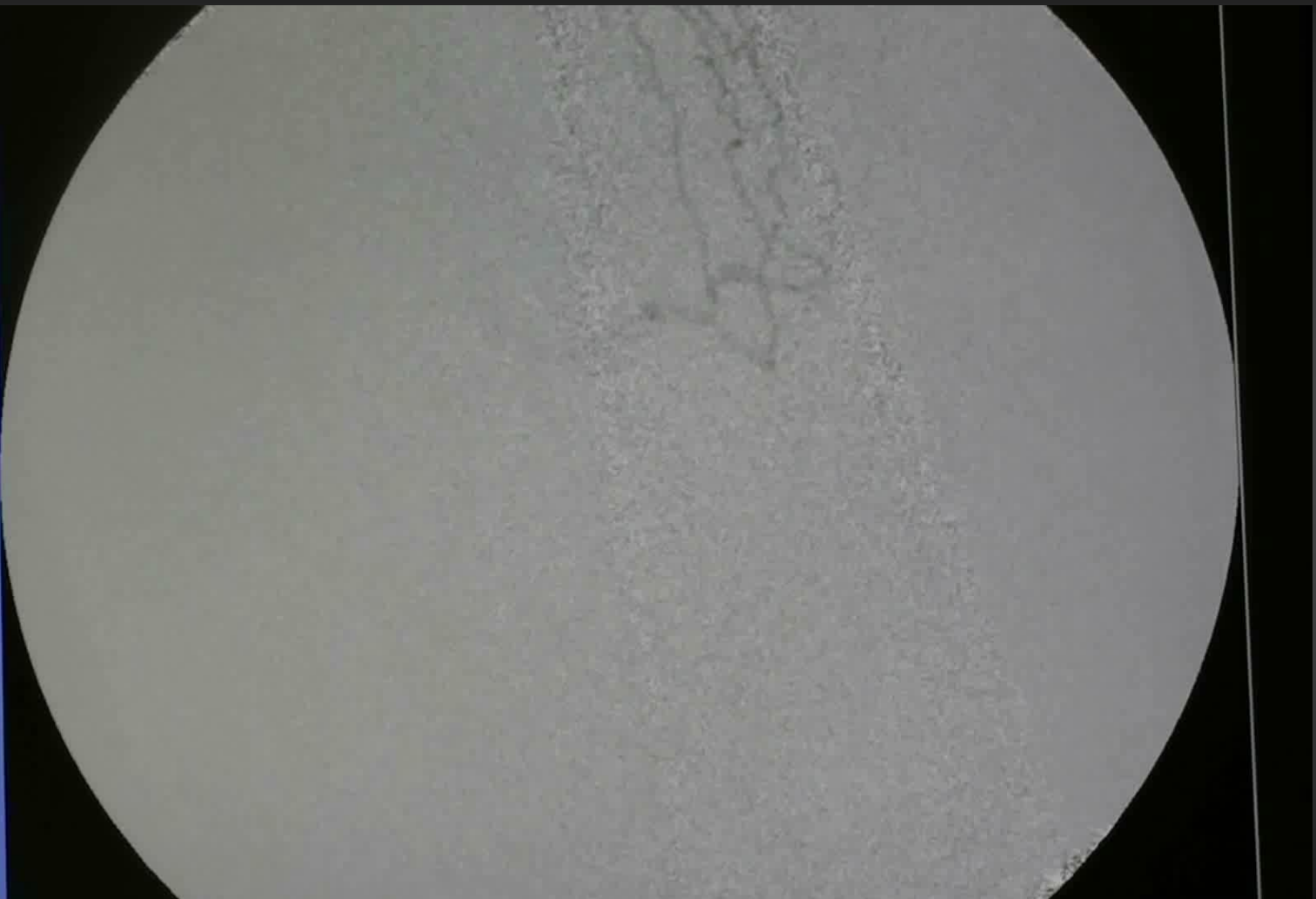


Basique / Etendu

Art Outils

Image Sout

Ciné

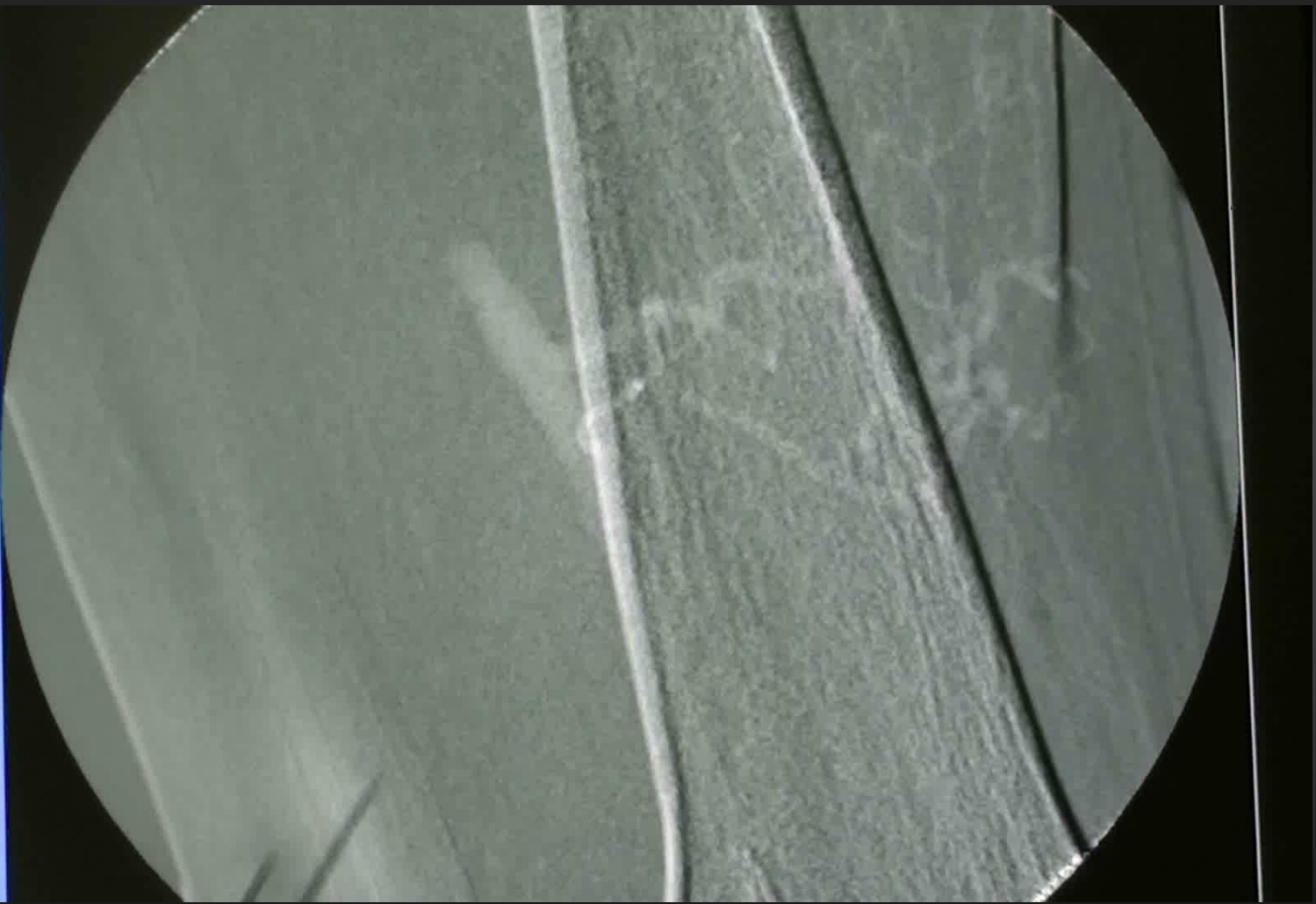


Basique / Etendu

Aff Outils

Image Soust

Ciné



Ex

Visualisation

Basique / Etendu

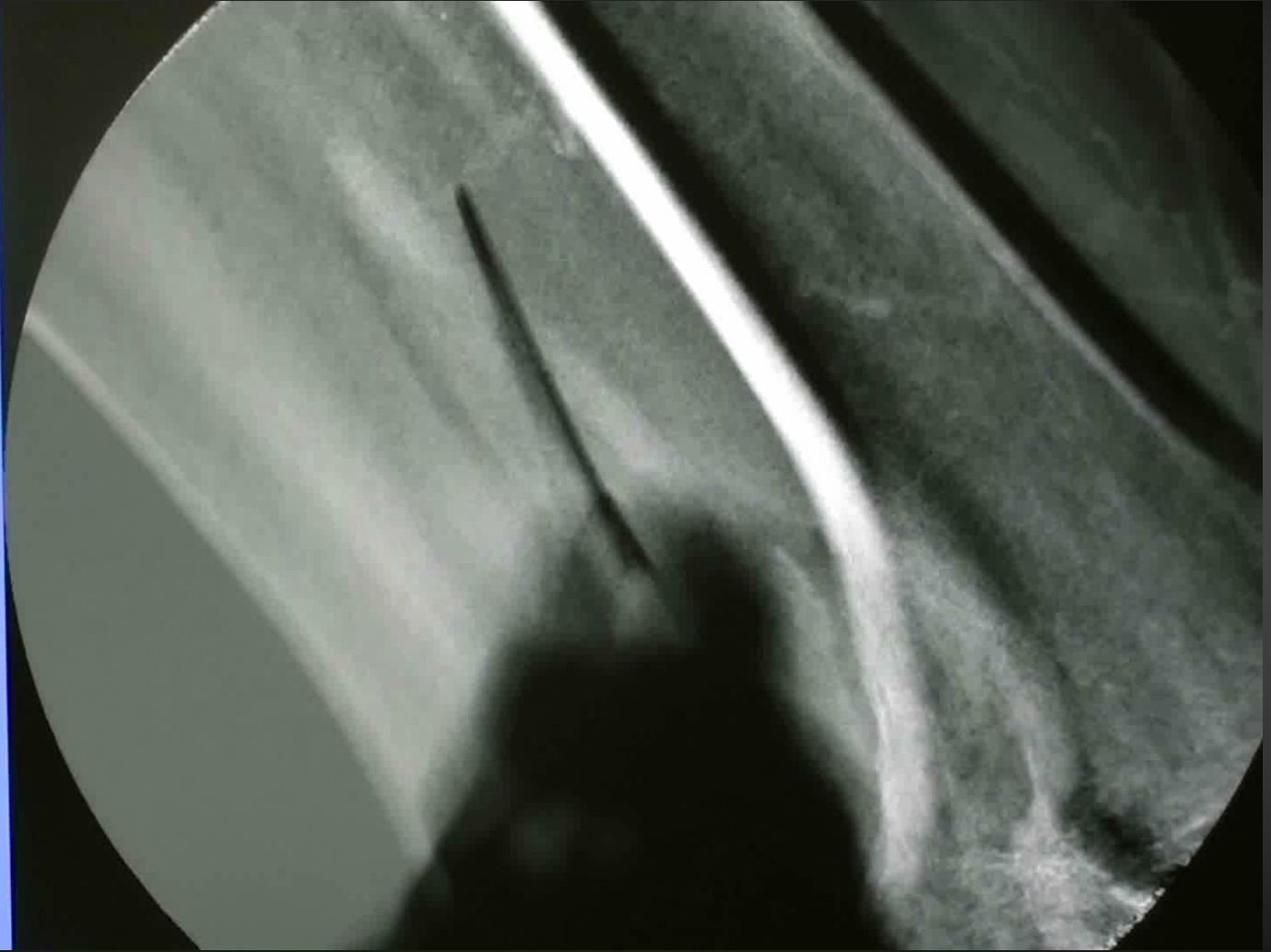
Aff. Outils

Image Soust.

Ciné

Lecture

The image shows a software interface for visualization. On the left is a sidebar titled 'Visualisation' with a sub-menu 'Ex'. It contains three main sections: 'Basique / Etendu' with 'Aff.' and 'Outils' tabs; 'Image' with 'Soust.' tab; and 'Ciné'. The 'Ciné' section has a progress bar and playback controls. The main window displays a grayscale image of a curved surface with a bright line.







SHEATH ?

- In most cases
 - Not necessary
 - Just support catheter
 - Just recanalisation – PTA – stenting by antegrade approach
- In some cases – 4 to 6 Fr sheath
 - Any antegrade approach possible
 - Necessity for a « rendez-vous » technique

Support catheter

- Necessary for control and pushability



Support catheter

- Control

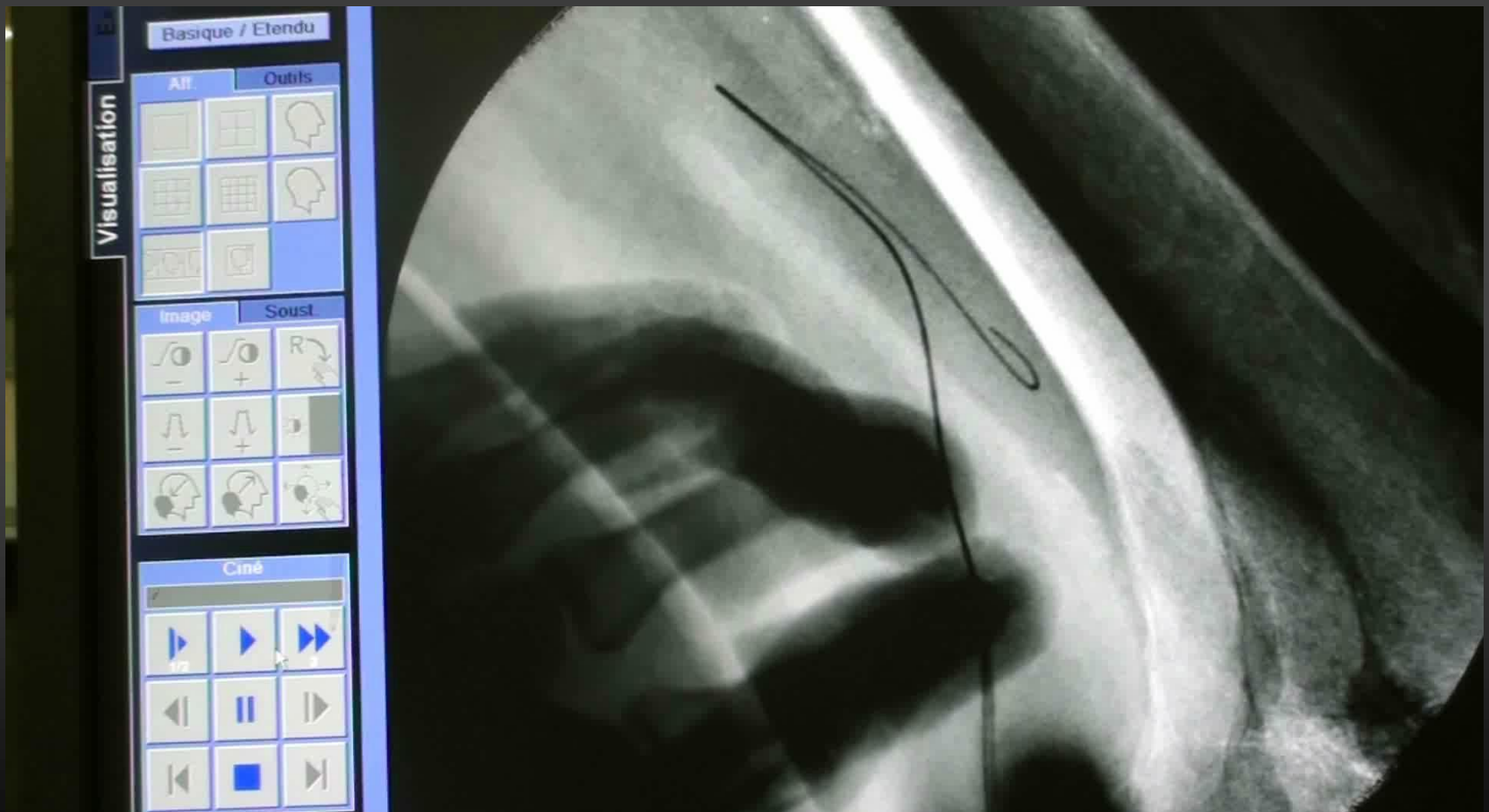


Support catheter



Support catheter

- Pushability



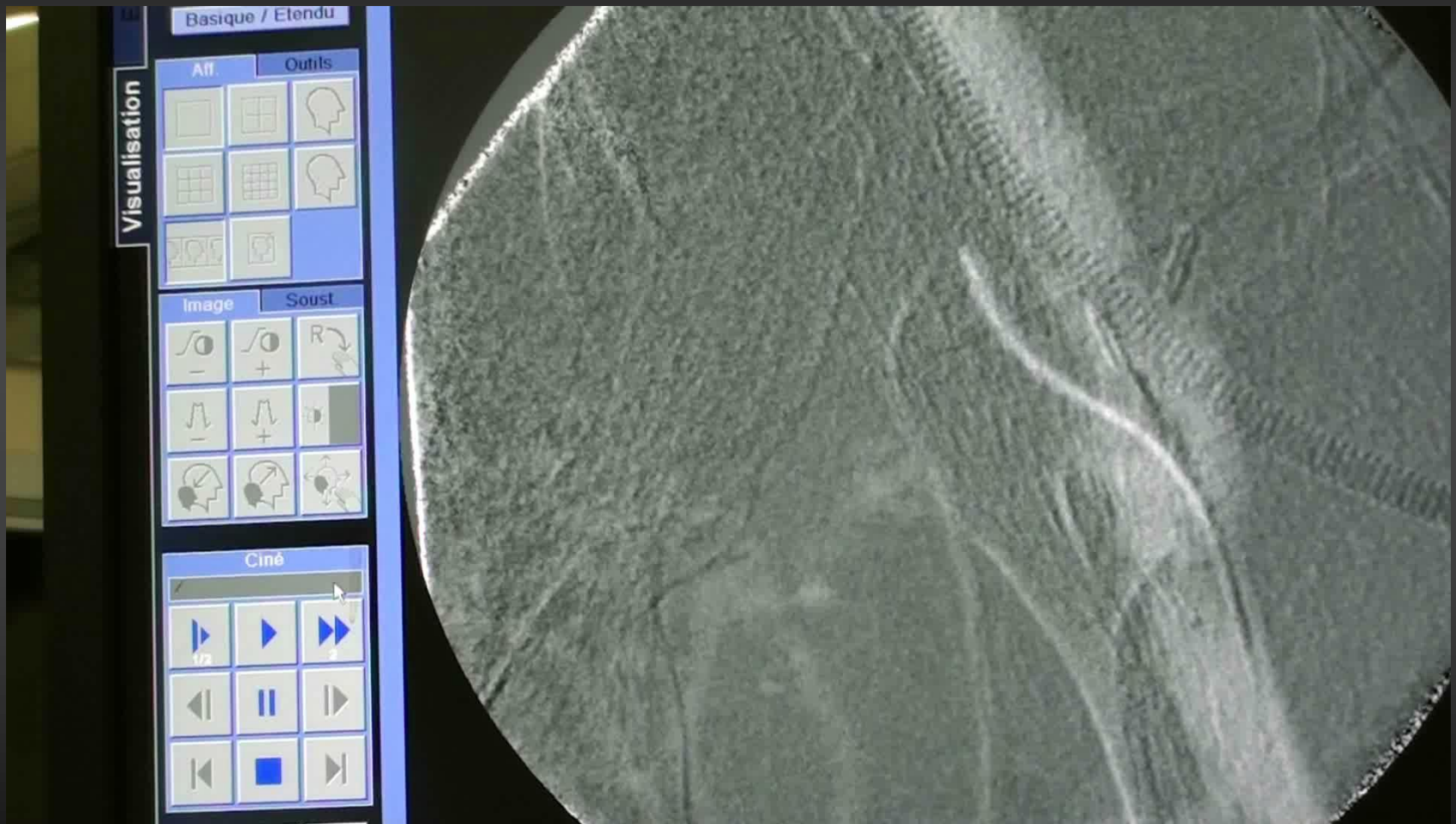
Support catheter



Re-entry

- That may be the main problem
 - Support catheter is helpfull
 - « rendez-vous » technique
 - Re-catheterization into the antegrade sheath
- Re-start the procedure on antegrade approach
- Main problem : previous CFA surgery
 - Thromboendarterectomy
 - Bypass anastomosis

Re-entry



Distal haemostasis

- Wire + support catheter: Ø
- Sheath + antegrade procedure
 - Stenting on the puncture site
 - Long inflation
 - Control +++
- Sheath + all retrograde procedure
 - Compression +/- closure device

RESULTS

- First description
- 2001- Yilmaz S, Sindel T, Ceken K et al; radiology department, Antalya, Turkey. Cardiovasc Intervent Radiol 2001;24:154-60.
- 39 cases.
 - Technical succes: 82%
 - 2 minor hematomas + 2 SFA ruptures (10.25%)

RESULTS

- Saha S, Gibson M, Magee TR et al. Cardiovasc Intervent Radiol. 2011;24: 378-82.
- 40 cases
 - Technical succes: 95 % (1 case: no lesion !)
 - Complication rate: 0 %
 - In FU: surgery : 7.5 %
 - In FU amputation rate: 5 %

RESULTS

- 56 patients
 - Technical success: 98.2%
 - Complications rate: 10.7%

J Endovasc Ther. 2009 Oct;16(5):619-23. doi: 10.1583/09-2784.1.

Retrograde transpopliteal recanalization of chronic superficial femoral artery occlusion after failed re-entry during antegrade subintimal angioplasty.

Noory E, Rastan A, Schwarzwälder U, Sixt S, Beschorner U, Bürgelin K, Neumann FJ, Zeller T.

Department of Angiology, Herz-Zentrum Bad Krozingen, Germany. elias.noory@herzzentrum.de

RESULTS

- 23 patients
 - Technical success: 95.7%
 - No different via retrograde access

Catheter Cardiovasc Interv. 2012 Jun 1;79(7):1188-93. doi: 10.1002/ccd.23361. Epub 2012 Jan 10.

Retrograde popliteal access as bail-out strategy for challenging occlusions of the superficial femoral artery: a multicenter registry.

Sangiorgi G, Lauria G, Airolidi E, Godino C, Politi L, Colombo A, Clerici G, Modena MG, Biondi-Zoccai G.

Division of Cardiology, University of Tor Vergata, Rome, Italy.

- 26 patients
 - Technical success: 100%
 - Complication rate: 7.7%

J Endovasc Ther. 2011 Aug;18(4):503-9. doi: 10.1583/11-3425.1.

Retrograde popliteal access in the supine patient for recanalization of the superficial femoral artery: initial results.

Fanelli F, Lucatelli P, Allegritti M, Corona M, Rossi P, Passariello R.

Department of Radiological Sciences, Vascular and Interventional Radiology Unit, Sapienza University of Rome, Rome, Italy. fabrizio.fanelli@uniroma1.it

RESULTS

- 50 patients
 - Technical success: 96%
 - Complication rate: 12%
 - 4 pseudoaneurysms (2 distal + 2 proximal)
 - 1 peripheral embolism
 - 1 distal AVF

J Endovasc Ther. 2012 Feb;19(1):23-9. doi: 10.1583/11-3645.1.

Retrograde recanalization technique for use after failed antegrade angioplasty in chronic femoral artery occlusions.

Schmidt A, Bausback Y, Piorkowski M, Werner M, Bräunlich S, Ulrich M, Varcoe R, Friedenberger J, Schuster J, Botsios S, Scheinert D.

Center for Vascular Medicine, Angiology, and Vascular Surgery, Park Hospital Leipzig, Germany.
Andrej.schmidt@gmx.de

Personnal experience

- 25 cases
 - 21 for technical rescue
 - 4 primary intention
- Technical success: 84%
 - 3 previous proximal surgery
- Complication rate: 12%
 - 2 small hematomas
 - 1 proximal pseudoaneurysm

SUMMARY

- Safe and secure technique
- May improve the technical success for SFA recanalisation
- May be realised as a routine technique if necessary
- It remains some limitation (previous surgery)

Main problem: the landing zone

