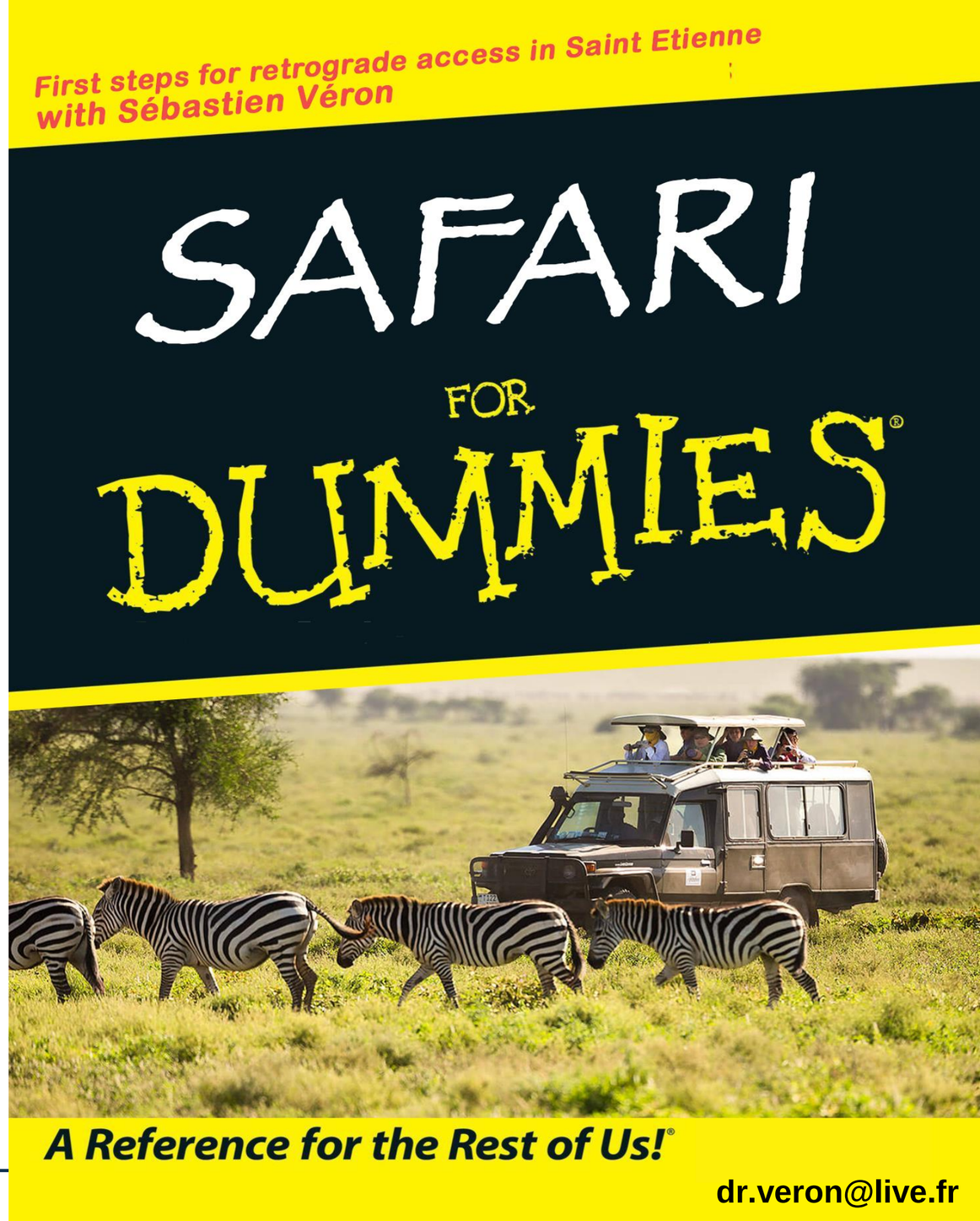
SAFARI POUR LES NULS

CACVS 2018

Sébastien Véron M.D.
Saint Etienne

Ramsay Générale de Santé
Hôpital privé de la Loire



Disclosures

HISTORY

- **September 2011 : CIRCE Munich**
- Octobrer 2011 : First case – OEC GE 9900 motorized C-arm + Steris table
- **January 2012 : CACVS Cook symposium 25 cases – How ?**
- Since 2012 : Many Workshops (5-7 per year)
- September 2012 : Endowest
- **January 2013 : CACVS Cook symposium 100 cases – Why ?**
- September 2013 : Endowest
- January 2014 : Relocate to St Etienne – Siemens Arcadis C-arm + Maquet table
- January 2015 : Varap > 200 cas
- **December 2015 : Hybrid room Innova 530**
- **January 2018 : CACVS – SAFARI for Dummies - > 400 cases**

« One simplifies »
« One practices »
« One shares »

Ramsay Générale de Santé
Hôpital privé de la Loire

What’s the issue ?

~~How~~ ?

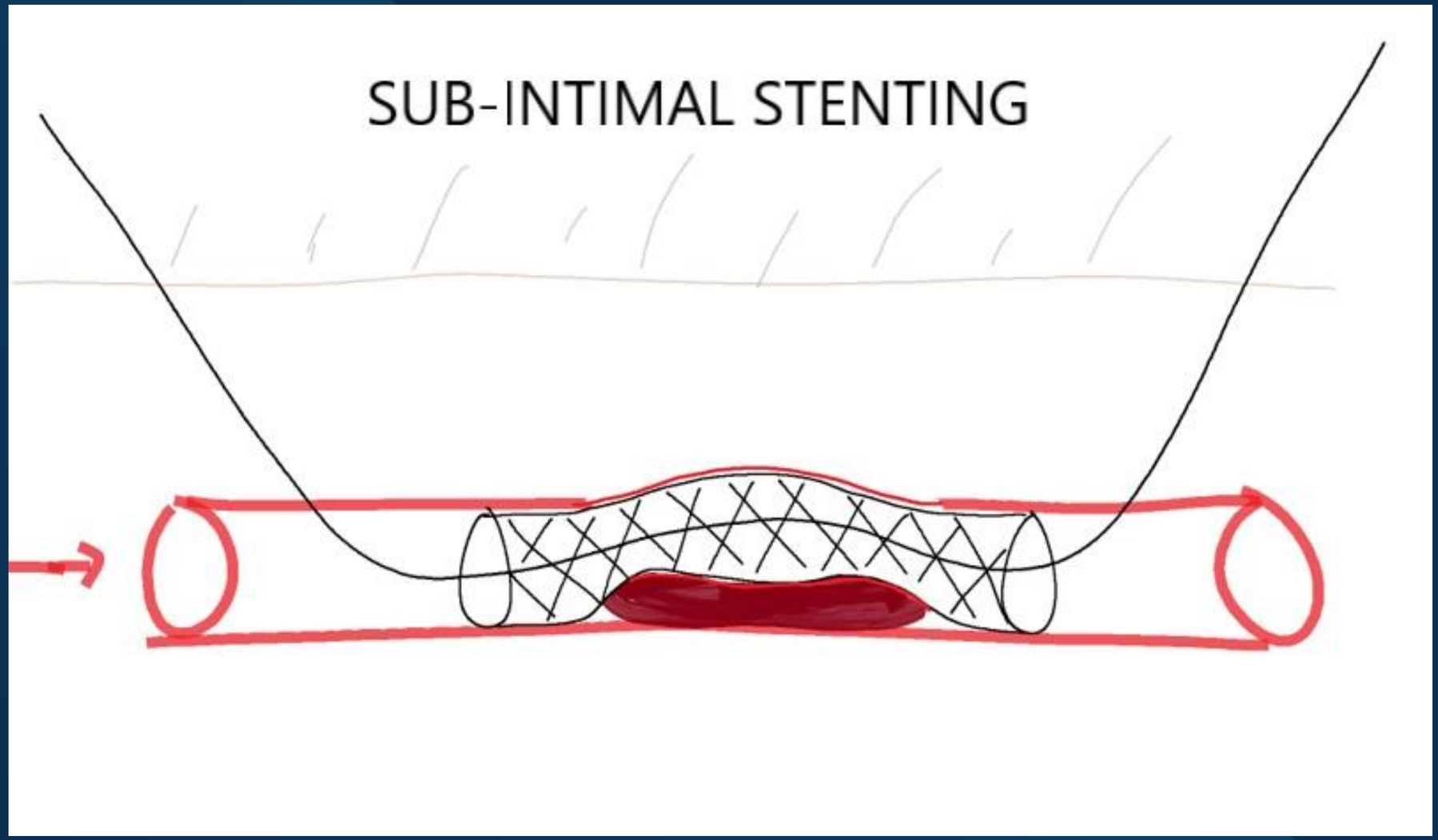
The real question is :

+++ Why ? +++

Ramsay Générale de Santé
Hôpital privé de la Loire

SAFARI - CONCEPT

Subintimal
Arterial
Flossing
Antegrade
Retrograde
Intervention



J Vasc Interv Radiol. 2003 Nov;14(11):1449-54.

Simultaneous antegrade and retrograde access for subintimal recanalization of peripheral arterial occlusion.

Spinosa DJ, Leung DA, Harthun NL, Cage DL, Fritz Angle J, Hagspiel KD, Matsumoto AH.

Department of Radiology, University of Virginia Health System, Charlottesville, Virginia 22908, USA. djs4m@virginia.edu

J Vasc Interv Radiol. 2005 Jan;16(1):37-44.

Subintimal arterial flossing with antegrade-retrograde intervention (SAFARI) for subintimal recanalization to treat chronic critical limb ischemia.

Spinosa DJ, Harthun NL, Bissonette EA, Cage D, Leung DA, Angle JF, Hagspiel KD, Kern JA, Crosby I, Wellons HA, Hartwell GD, Matsumoto AH.

Fairfax Radiology Consultants, Inova Fairfax Hospital, Falls Church, Virginia, USA. djs4m@virginia.edu

What for ?

- 20 % : complexe BTK recanalizations (failure by the top or artery injury or break)
- 65 % : finding the true lumen for SFA and popliteal recanalizations
- 14% : iliac recanalizations
- 1 % : other !

=

No use of expensive devices

(Outback, Pionner, Truepath…)

Ramsay Générale de Santé
Hôpital privé de la Loire

Hybrid room - Installation

STEP 1 – DISTAL ANGIOGRAPHY

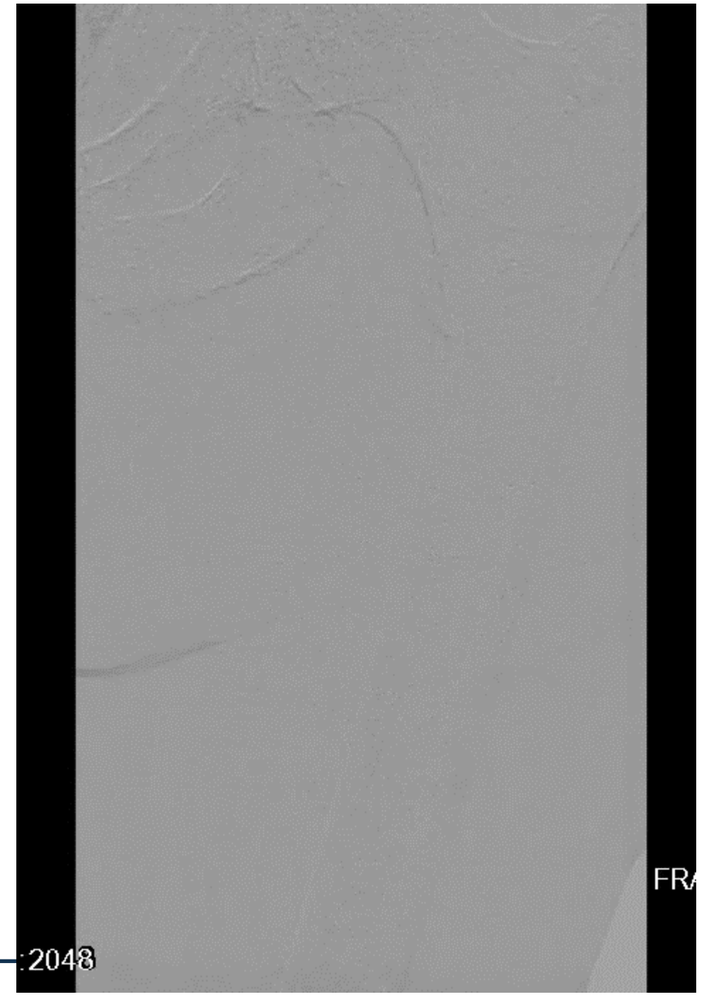
- **Take the decision quickly (less than 5 minutes – sometimes without trying by the top)**
- **Which artery to puncture ? The easiest +++**
- **No pressure on your shoulders ? You'll succeed ☺**

KEY POINT

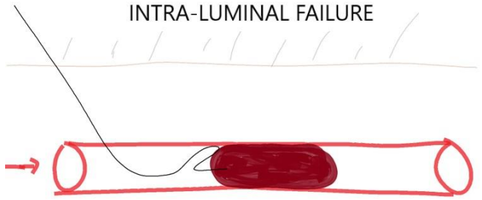
+++

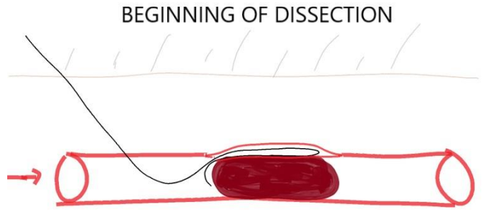
THE DIFFICULTY WILL NO LONGER BE IN THE CROSSING OF THE OCCLUSION BUT ONLY IN THE PUNCTURING OF THE SMALL ARTERY

+++



Step 2 – ANTEGRADE DISSECTION





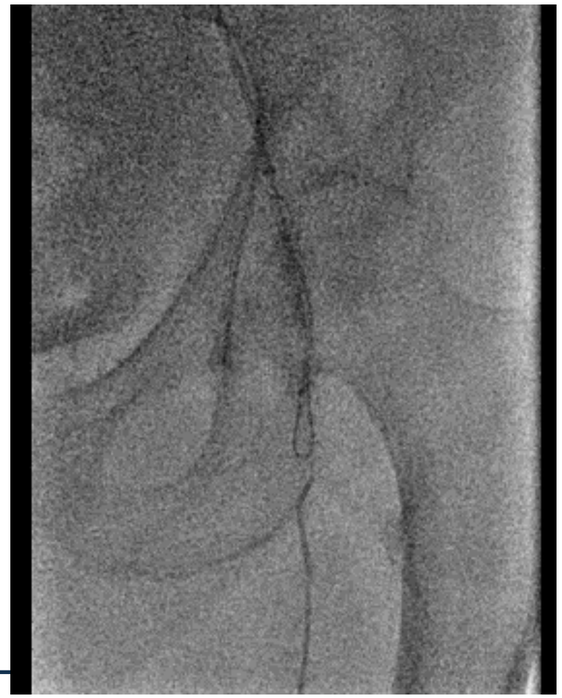
- Sometimes difficult with calcifications
- Close to the reentry

Don’t worry :

<u>« you’ve got a distal artery to puncture »</u>

+++HEPARIN +++

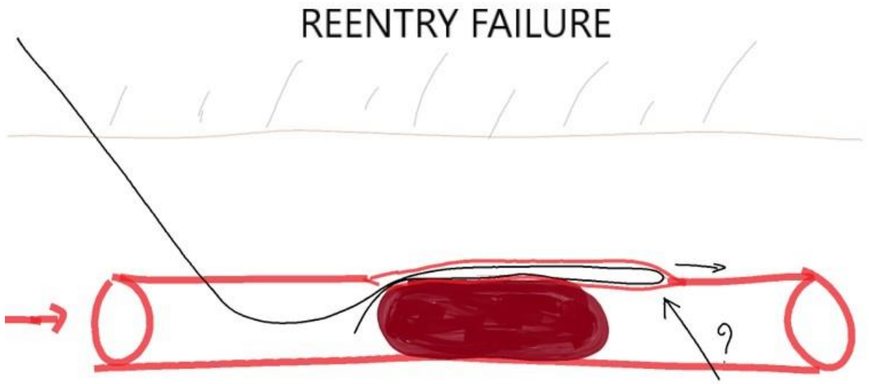
5000 UI

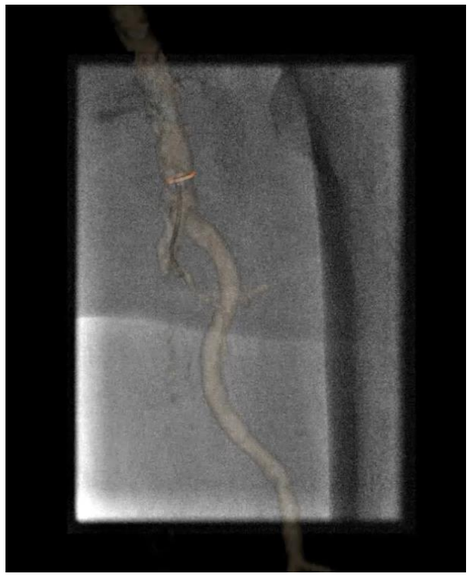


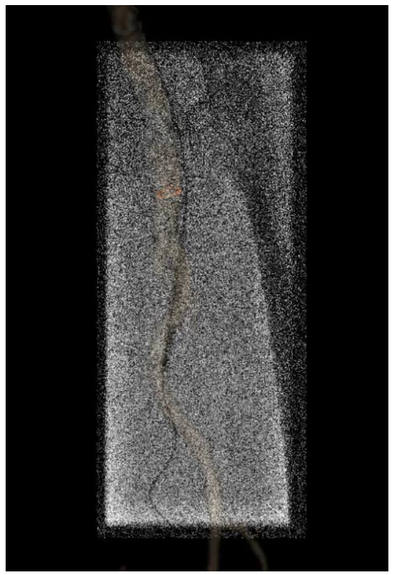
Ramsay Générale de Santé

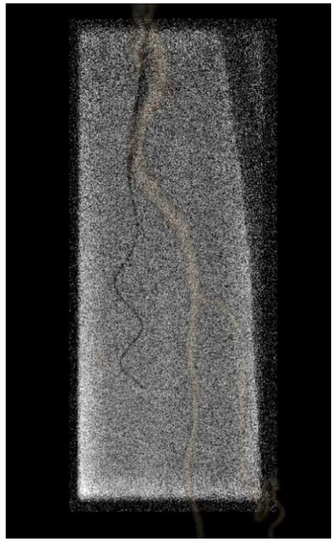
Hôpital privé de la Loire

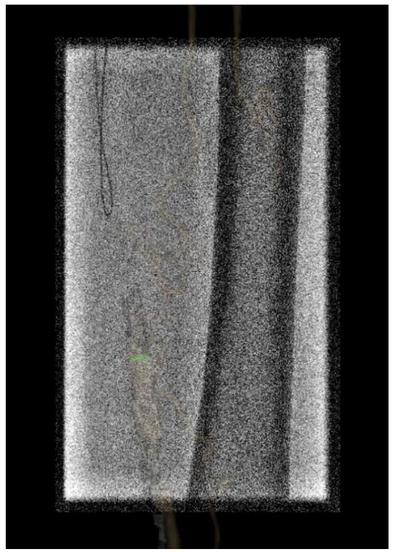
ANTEGRADE DISSECTION





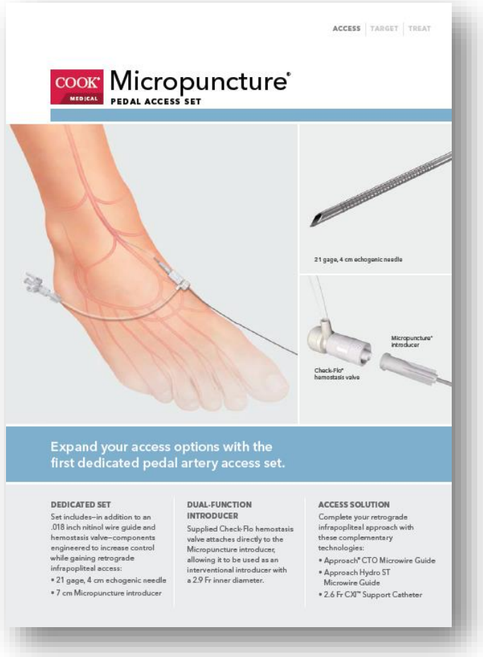


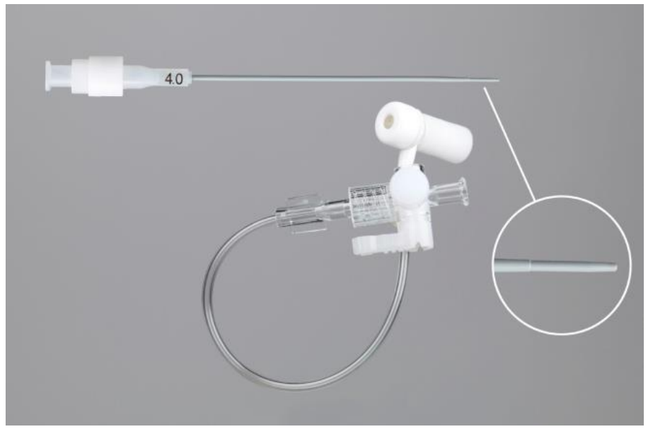




STEP 3 – RETROGRADE PUNCTURE

- **Device : Cook retrograde access kit**
- **Which artery ?**





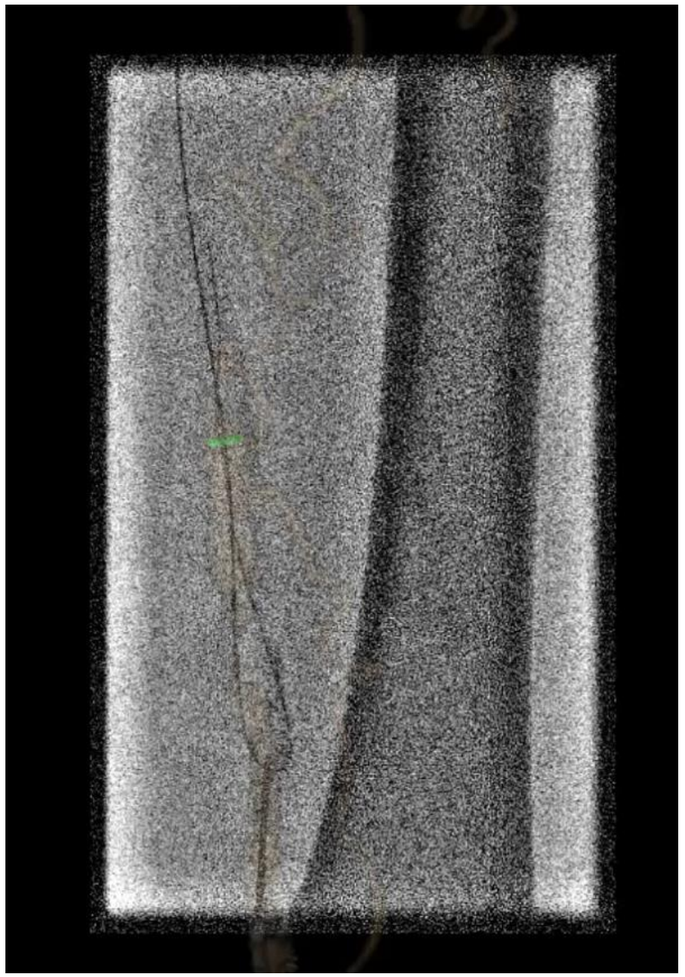
EASIEST

SFA
ATA
Pedal artery
Peroneal
PTA
(Popliteal)

HARDEST

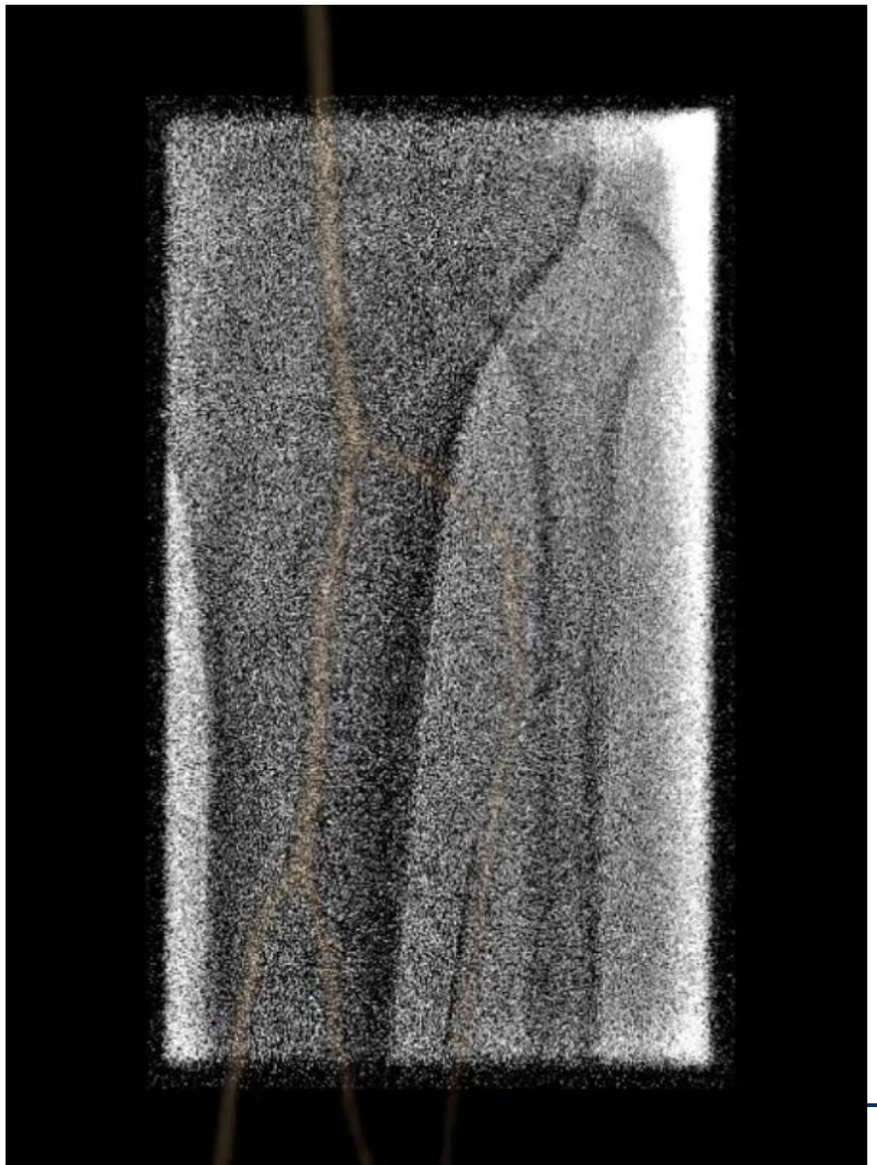
Ramsay Générale de Santé
Hôpital privé de la Loire

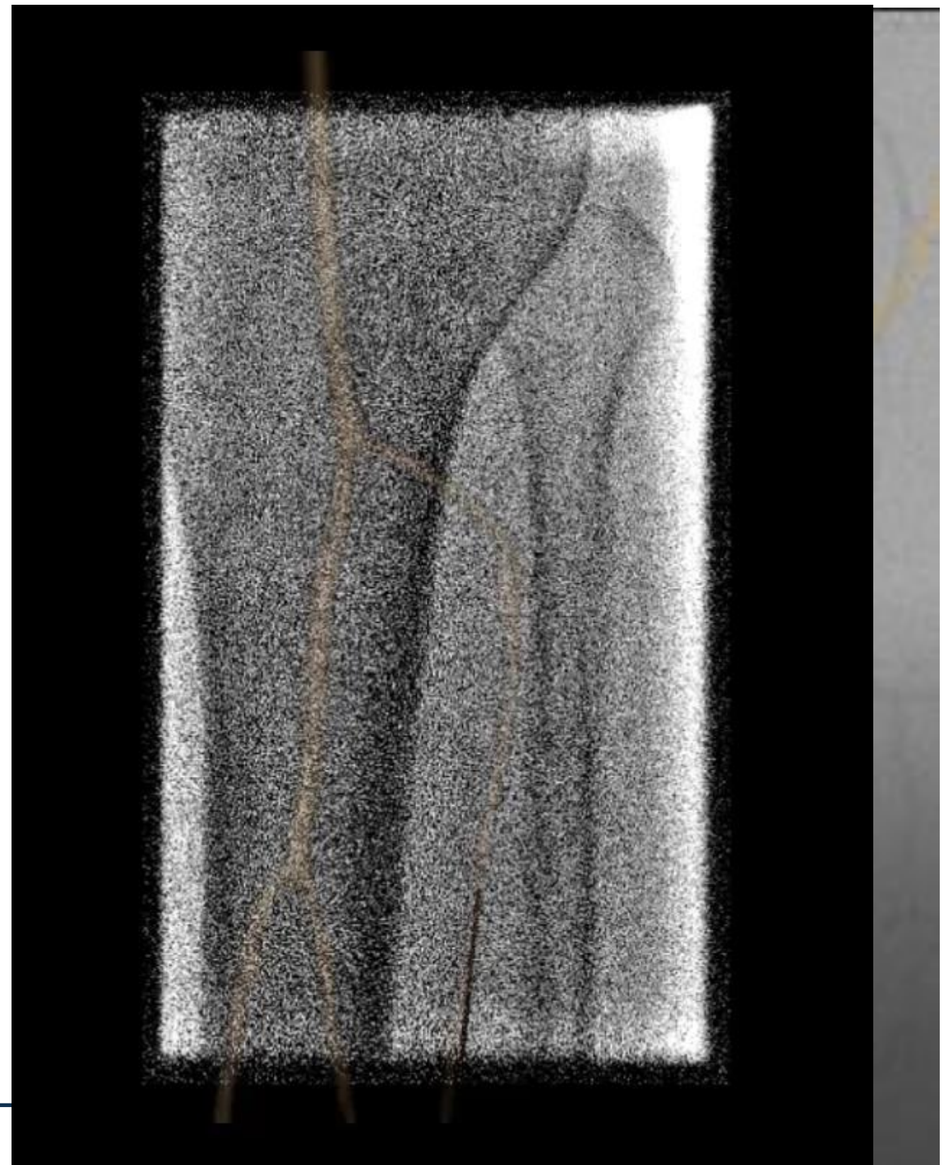
SFA PUNCTURE



ATA Puncture – « Old roadmap » !

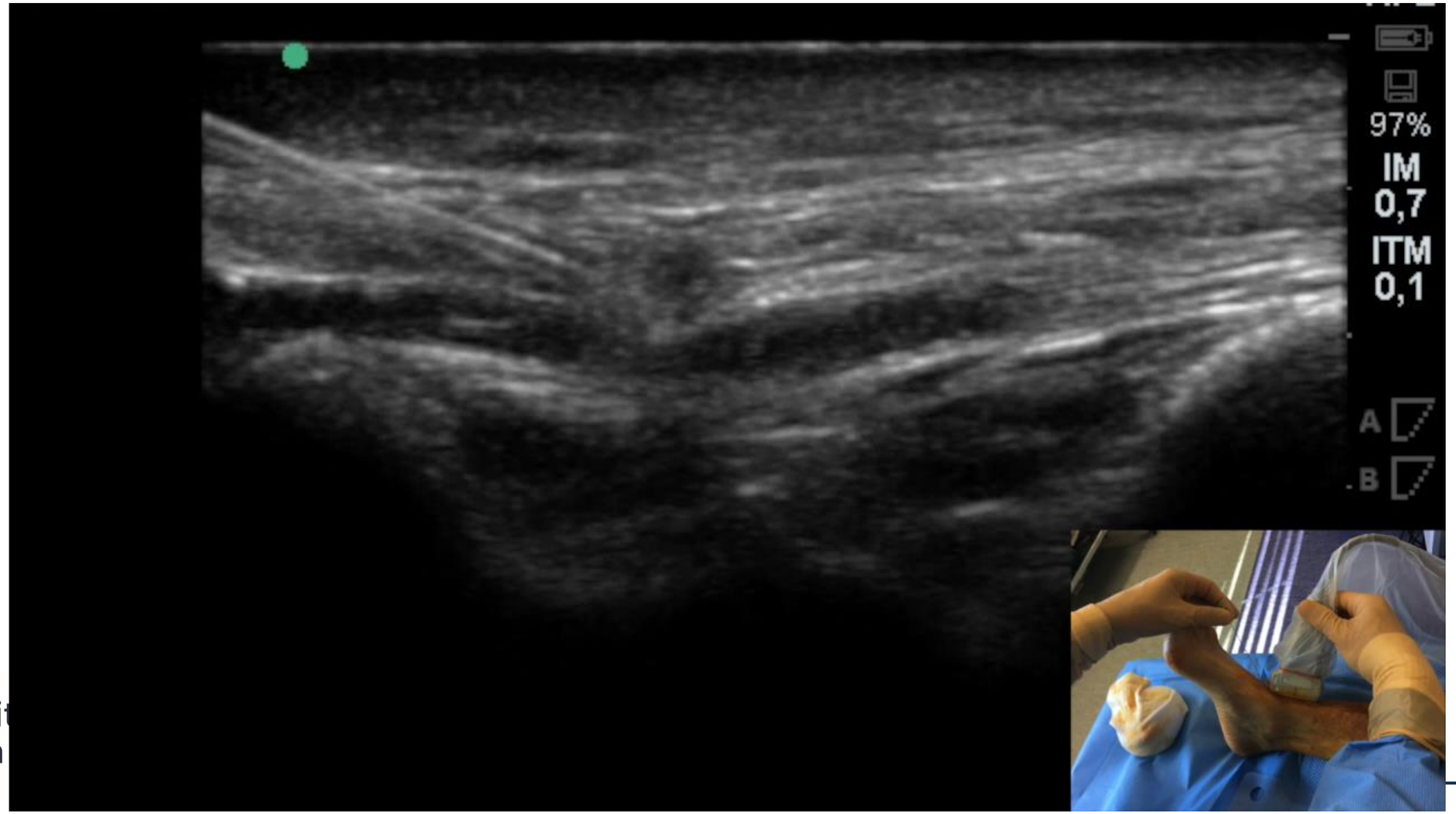
ATA Puncture – « Modern roadmap » !





Pedal puncture – Echoguidance

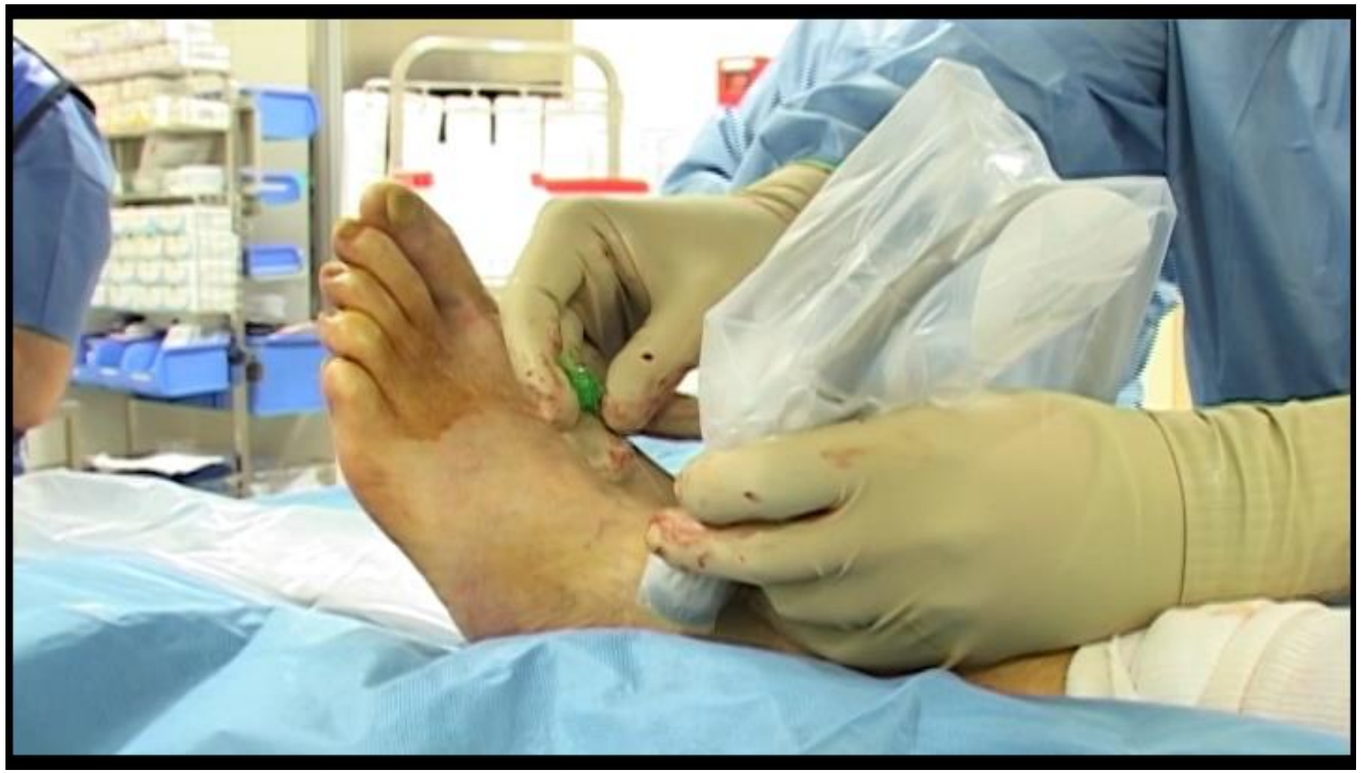
Thanks to Dr Penillon – Medipole de Savoie

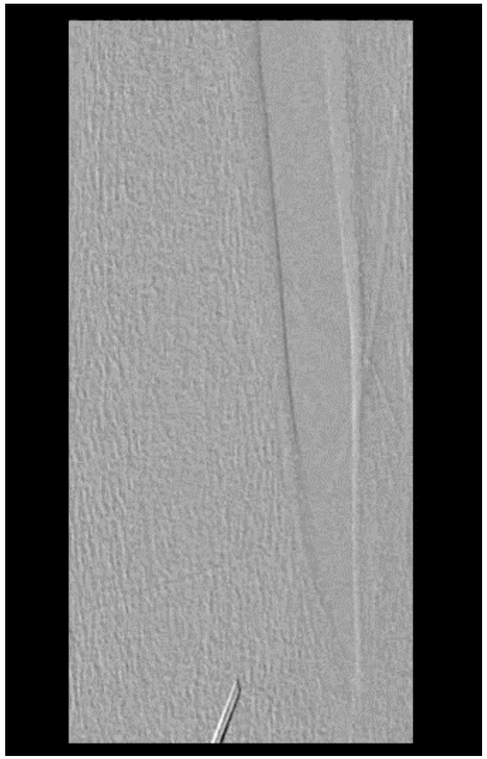


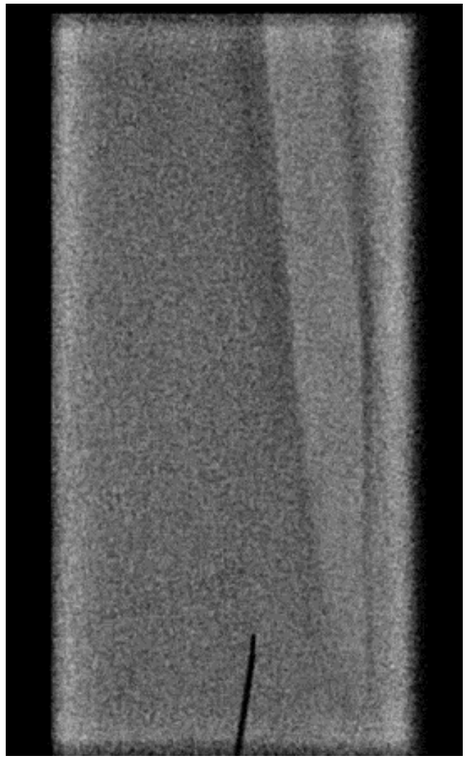
Ramsay Générale de Santé

Hôpit
de la

Pedal puncture
Active roadmap and echo guidance

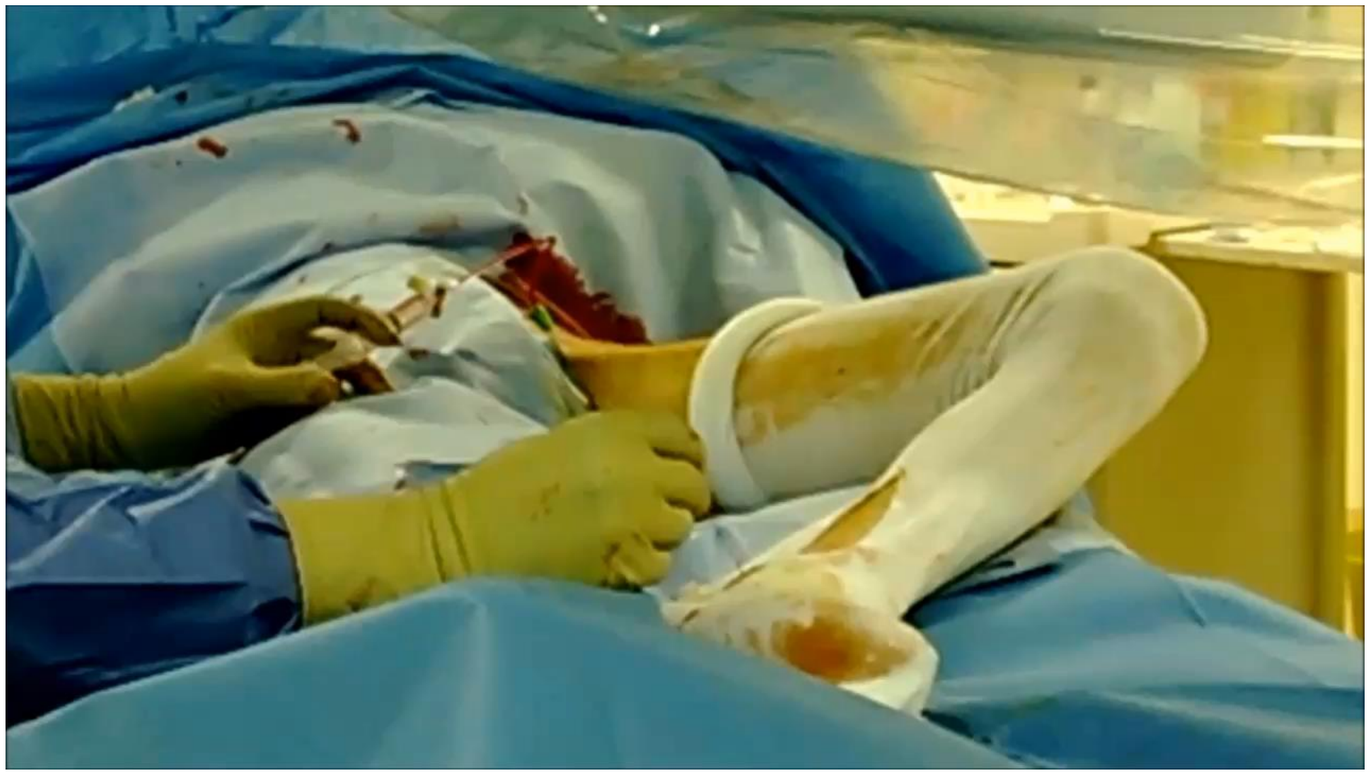






Posterior tibal artery puncture – Active roadmap

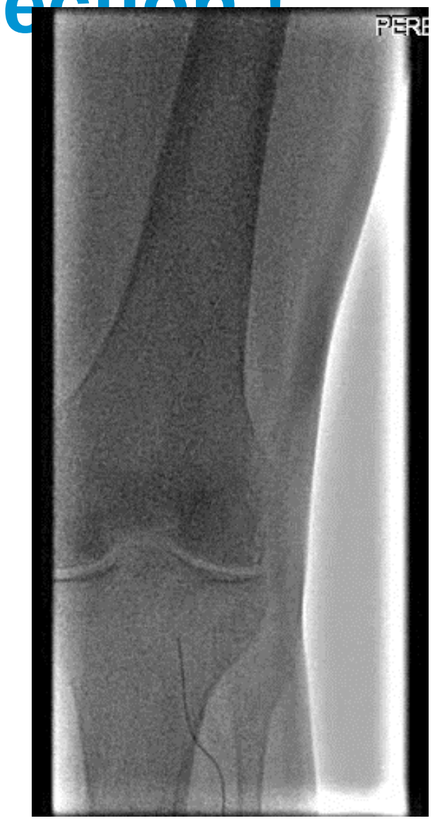
- Quite difficult
- Active roadmap
- **Echo guidance puncture +++**

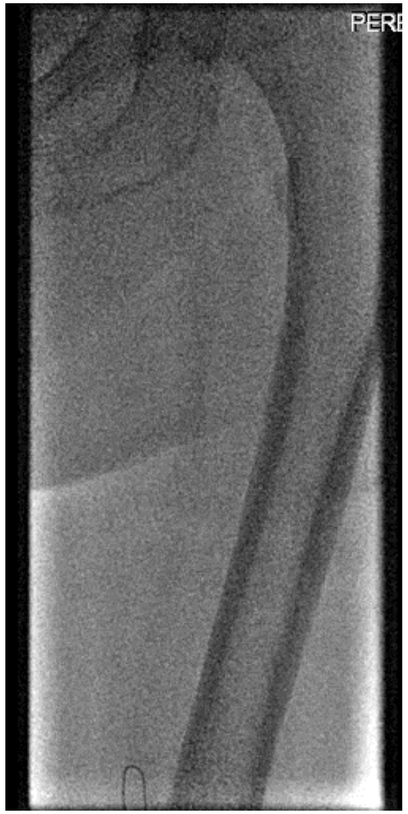


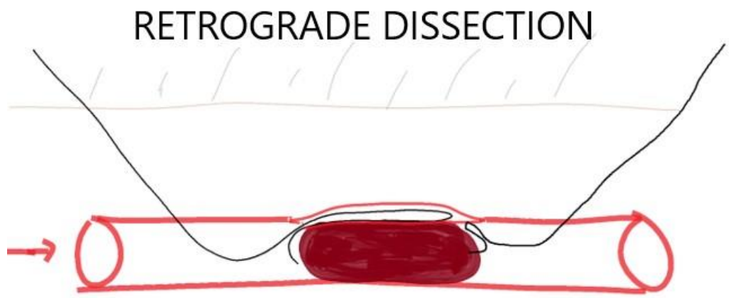
Ramsay Générale de Santé
Hôpital privé de la Loire

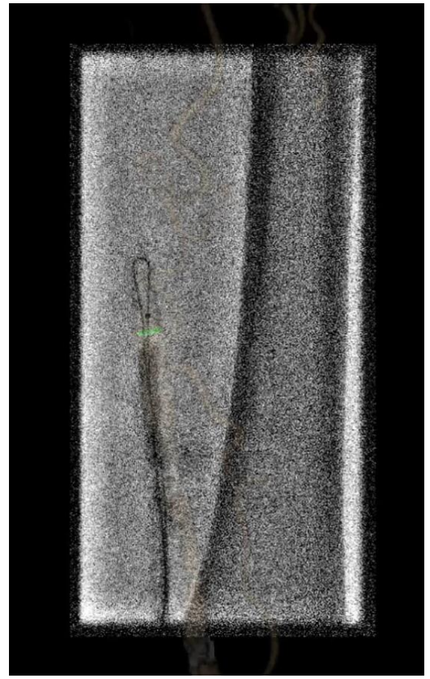
STEP 4 – RETROGRADE DISSECTION

Same technique as antegrade dissection !









Ramsay Générale de Santé
Hôpital privé de la Loire

STEP 5 – RENDEZ-VOUS AND CABLE CAR

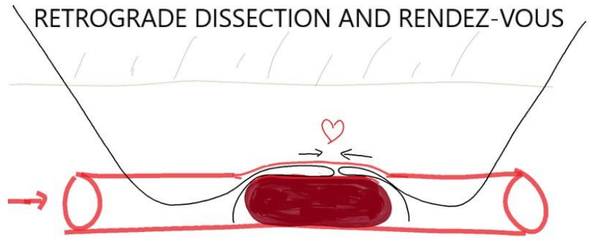
Thanks to Dr Penillon – Medipole de Savoie

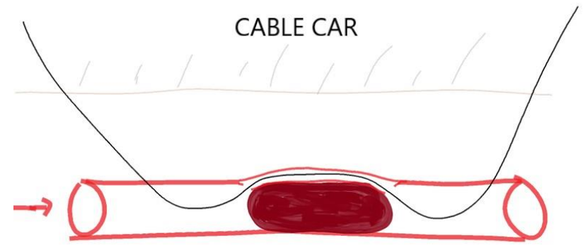
My Learning curve :

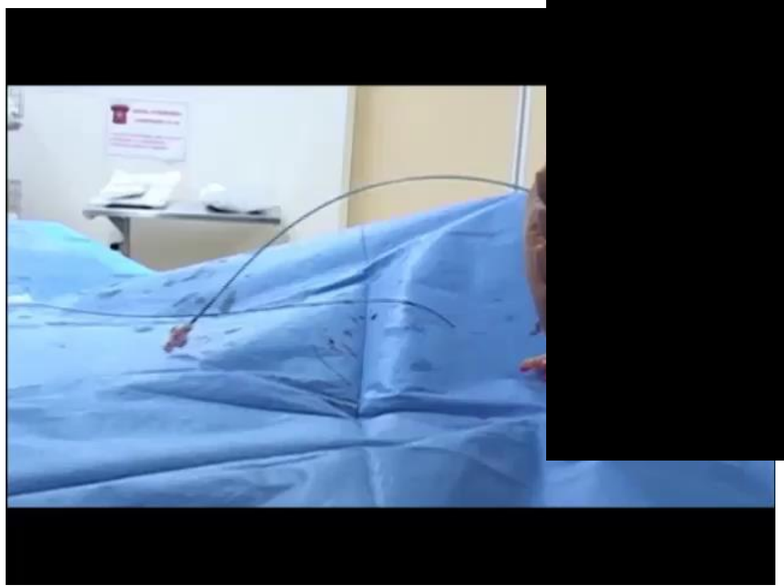
No lasso +++

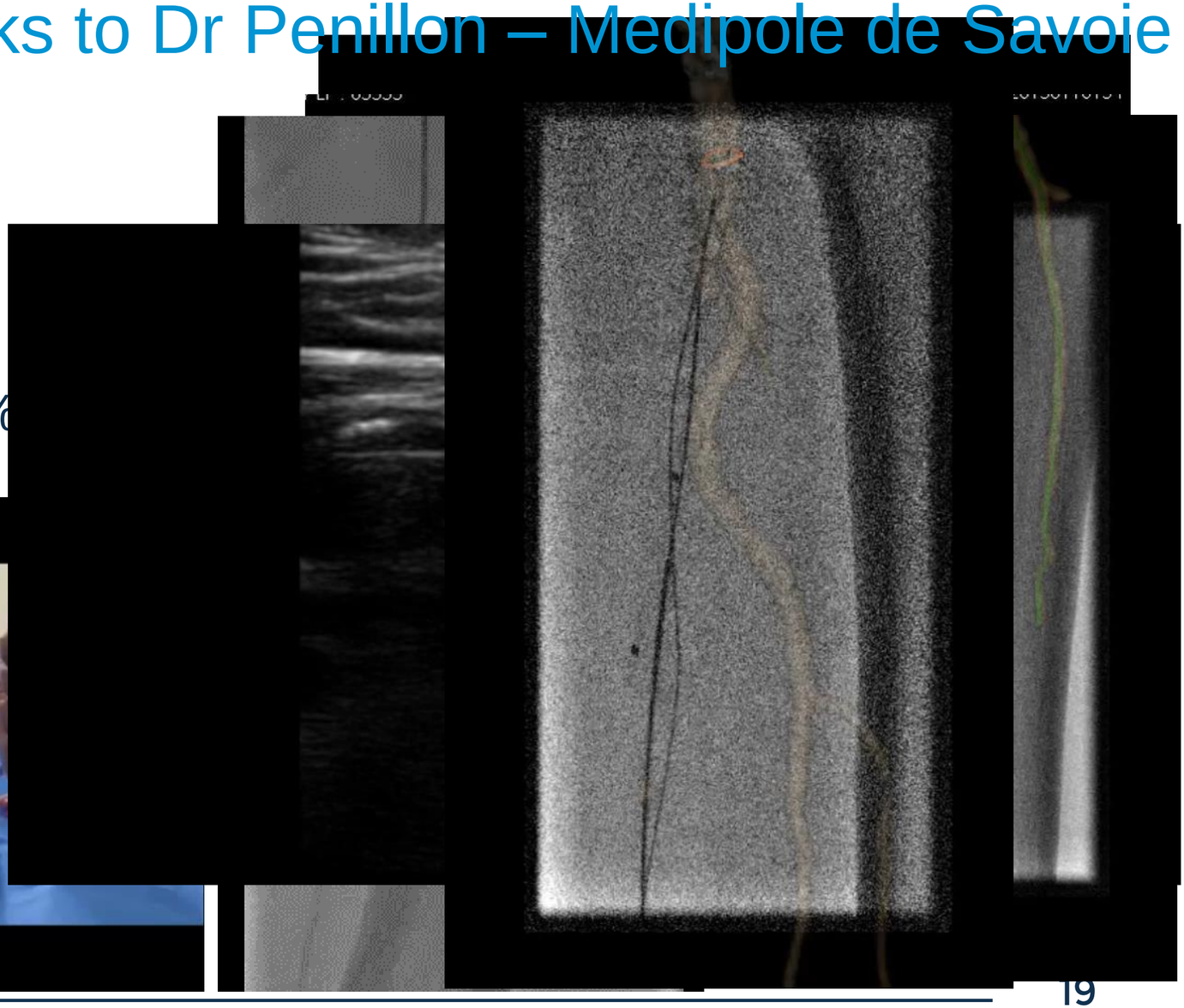
(Expensive and a brake for improving)

1. Guide wire 0,035 → 6F sheath
2. Guide wire 0,014 → Ber 2
3. Guide wire 0,035 → Ber 2 (99 %









STEP 6 - ANGIOPLASTY

Anything you want !

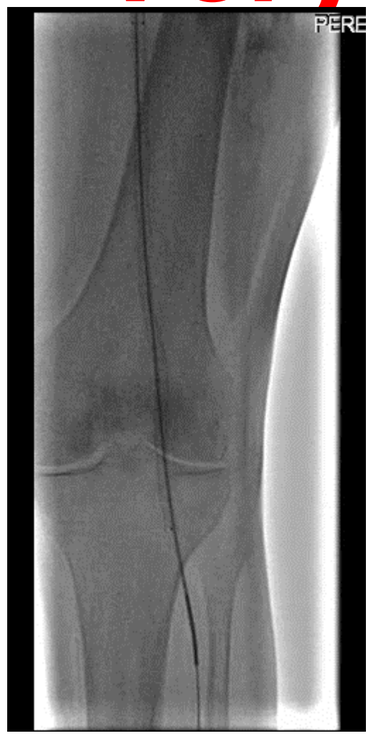
NO BIG DEAL

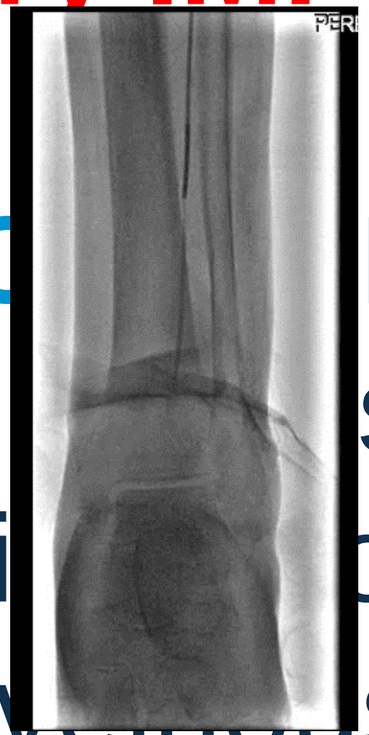
By the top or the down

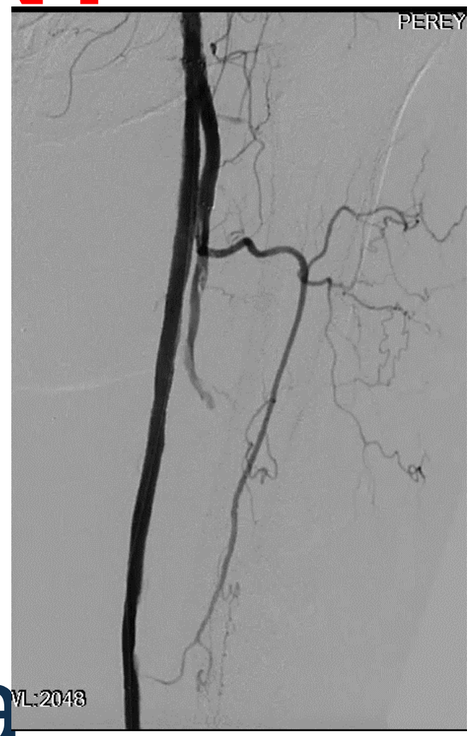
STEP 7 – PUNCTURE POINT ANGIOPLASTY

+++FAILURE+++

Very Very Very IMPORTANT +++







TC ID

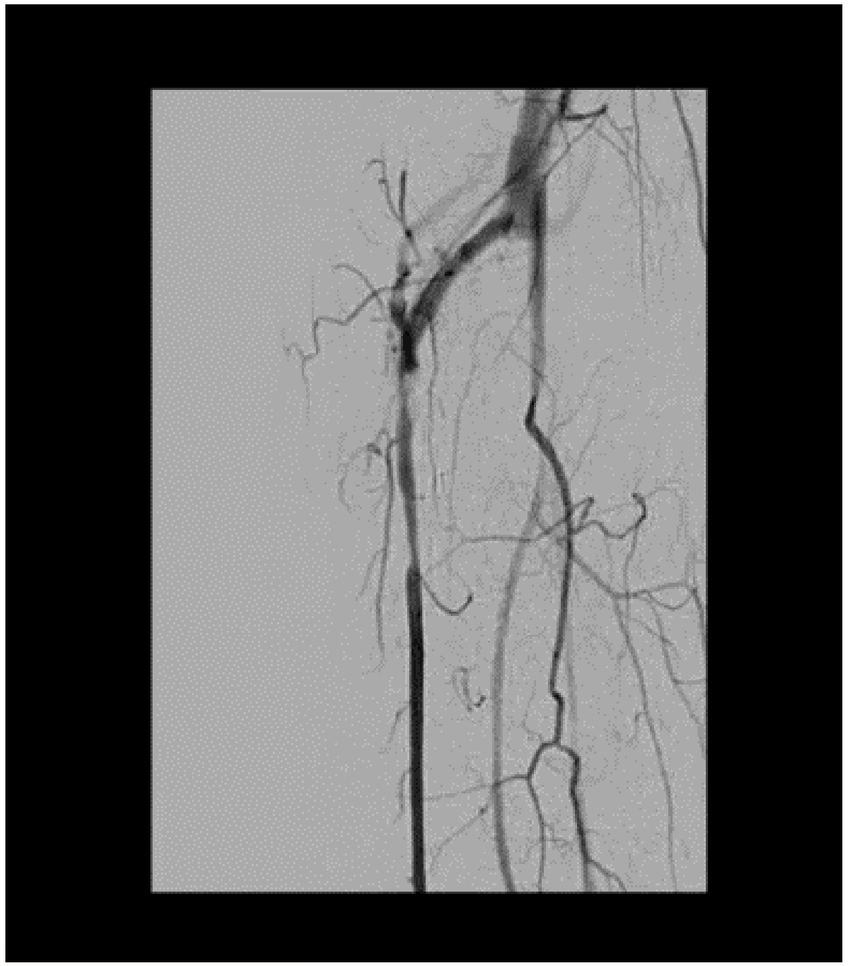
Th sis

Di on

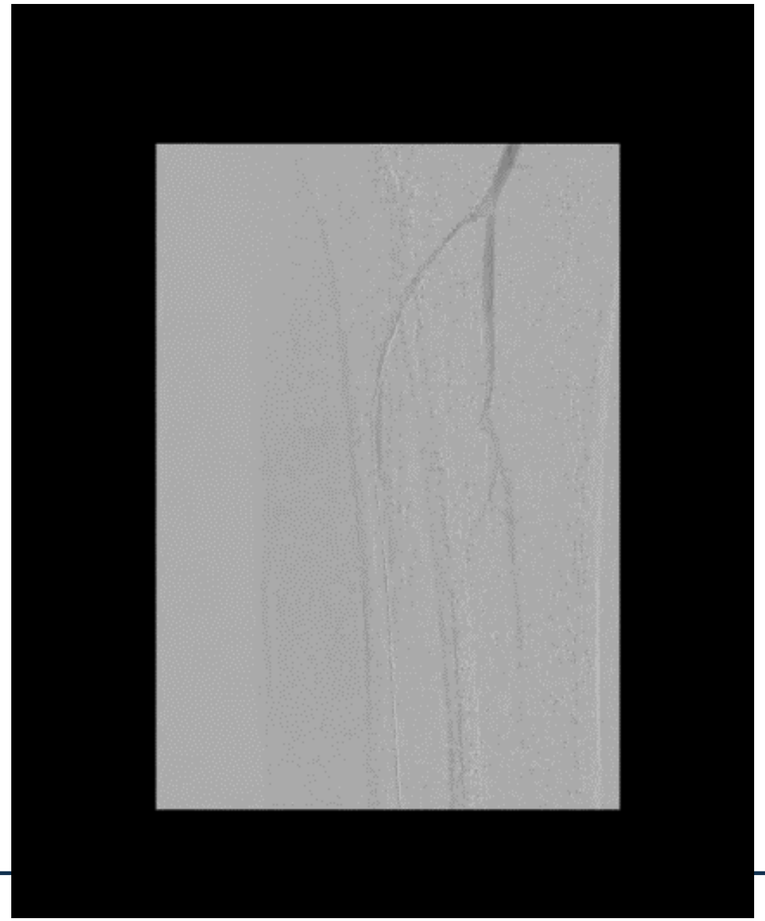
Arterio-v s fistula

Ramsay Générale de Santé
Hôpital privé de la Loire

Arterioveinous fistula

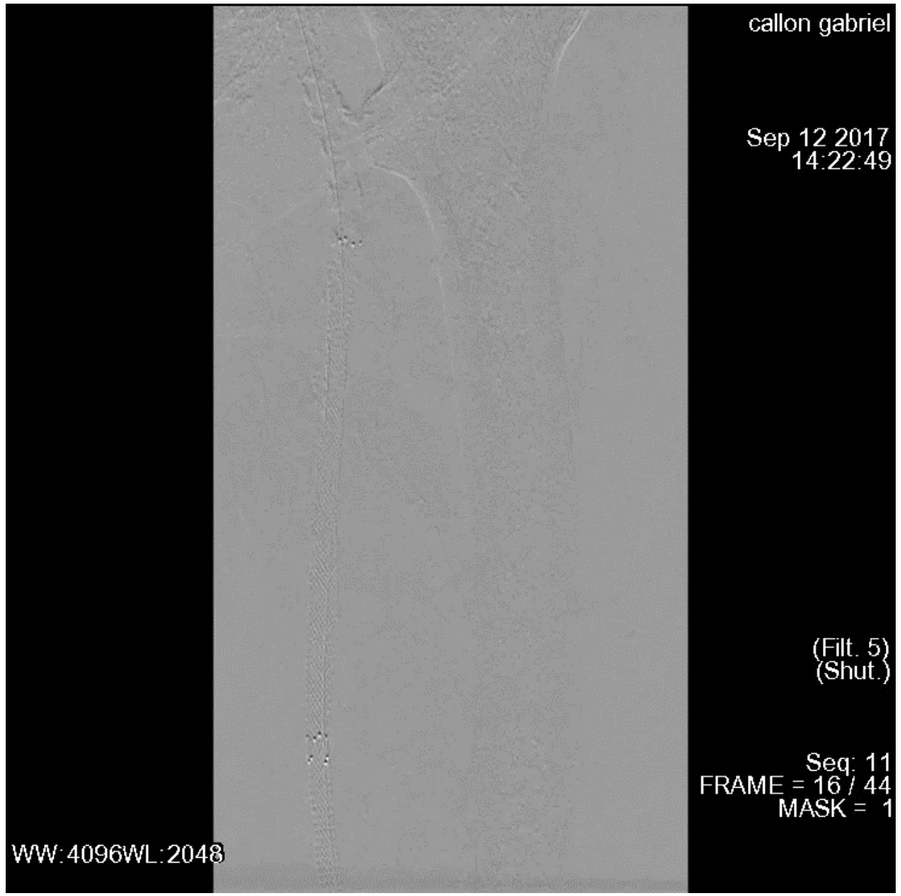


High risk of amputation
Angioplasty only +++

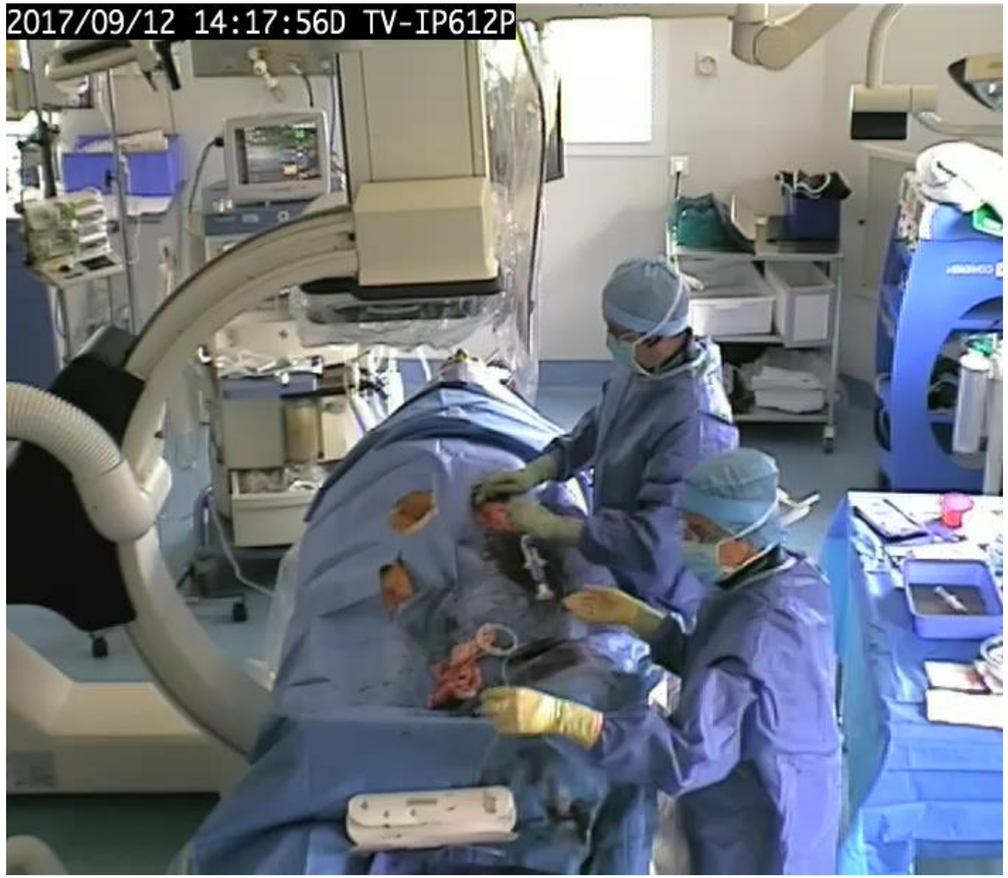


Ramsay Générale de Santé
Hôpital privé de la Loire

STEP 8 - Final control



STEP 9 - Fermeture



What’s SAFARI

It’s not a

~~BTK ANGIOPLASTY TECHNIQUE~~

It’s JUST a

REENTRY TECHNIQUE

GARANTED SUCCESS AT 99%

Ramsay Générale de Santé
Hôpital privé de la Loire

CACVS 2012
Symposium

Conclusion

« We can successfully improve recanalizations with retrograde access »

- Safe and can be reproduced
- Learning curve is rapid
- Devices are important

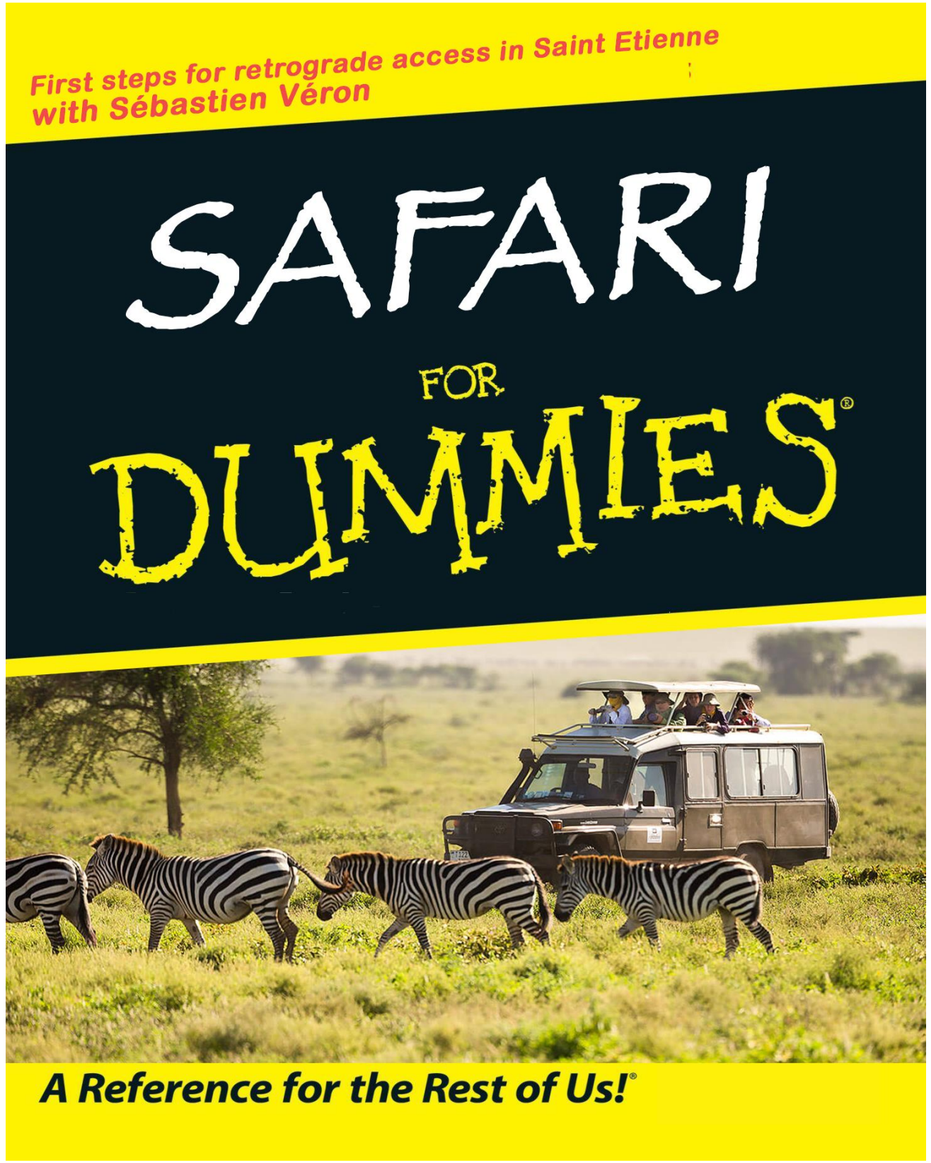
PLEASE TRY

COOK MEDICAL

ADVANCING ACCESS TARGET TREAT
VASCULAR PROCEDURES

Company Confidential

JUST DO IT !



Ramsay Générale de Santé
Hôpital privé de la Loire

Sébastien Véron M.D. - dr.veron@live.fr