Managing the groin Pseudoaneurysm

VS ASM 2018
Vice-President's Symposium

29/11/2018

KGJ

Keith G Jones

Consultant Vascular Surgeon

London Vascular TPD

Deputy Chair Vascular SAC

Am I a Groinery expert?

No

There is no such word in the dictionary!
Not allowed in scrabble!

So why ask me.?

My Remit?

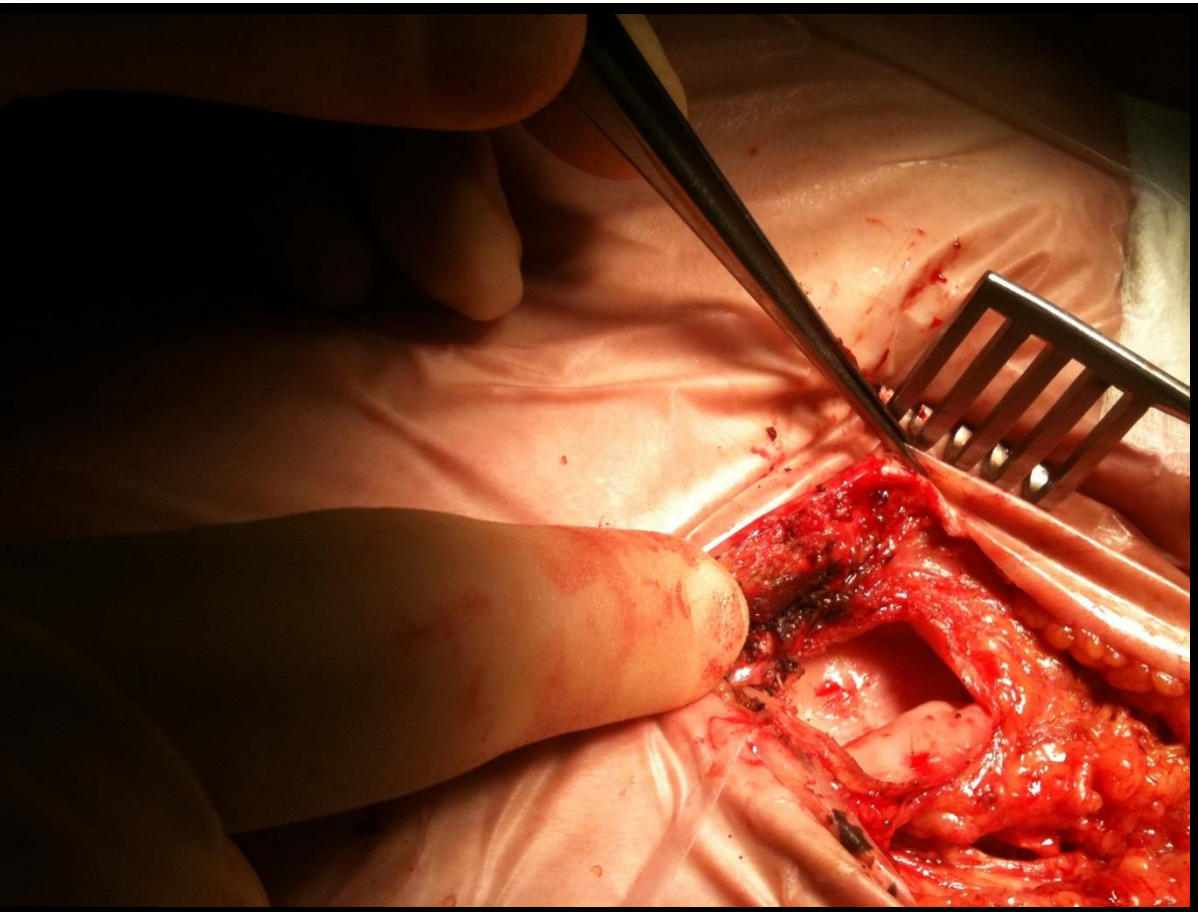
Groin Pseudoaneuryms

- **Post Cannulation- Cardiology / IR / PEVAR**
- **IV DU – infection**

Anastomotic- Proximal / Distal Aspect of graft

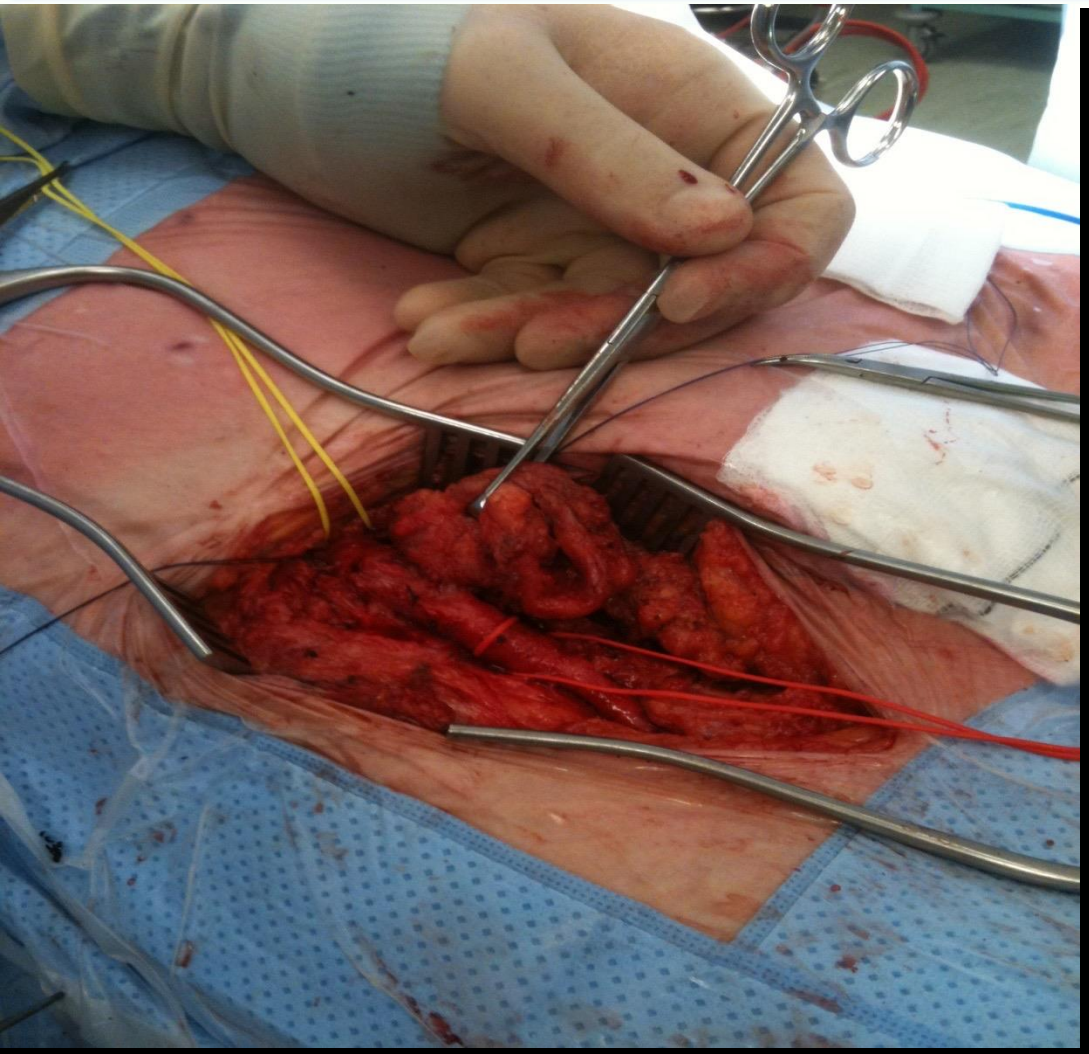
Is there advice on when to intervene?

How to repair? Role for endovascular / funny bypass options



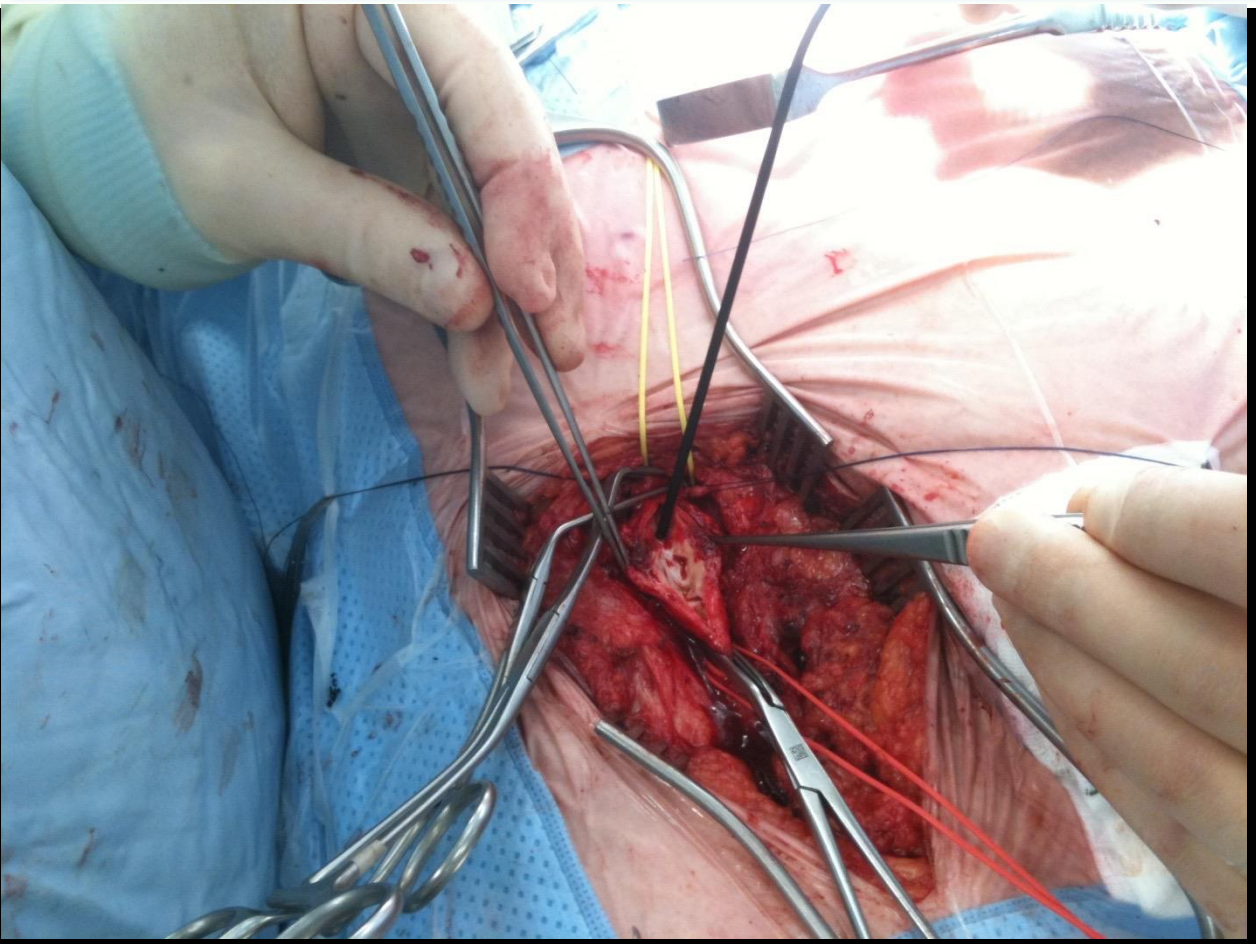
Post PEVAR
Painful mass

Post re-intervention



Is it a Pseudoaneurysm / False aneurysm?

Single layer of Fibrous tissue as the wall of the sac.
(Bailey and Love, 20th Ed 1988)



Difficulties of control;
Proximal dual clamp.
High PFA with balloon control.

Vein patch repair

No muscle flap required

What are the rules?

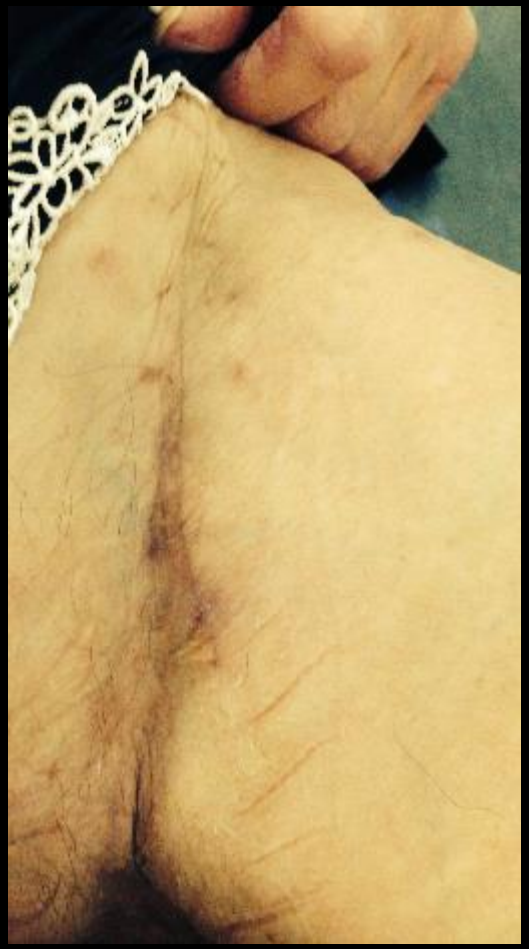
- **No role for Conservative Management if an anastomosis is distrupted!**
- **Increasing size risks arterial and venous compression, embolism or thrombosis (Vascular and Endovascular Surgery 2nd ed)**
- **Post Cannulation 2-3cm appears the cut off for intervention**

Post Cannulation?

Acceptable rate 0.2%

- **Reported 0.6%-6%**

Treat if over 2cm maximal diameter-
But NO Consensus guidelines
Look for neck length > .9cm
Thrombin injection~97% success rate
Lack of Thrombin- US compression



Non resolution/ Expanding/ Skin Pressure

Oblique Groin Crease Incision Control at the inguinal Ligament

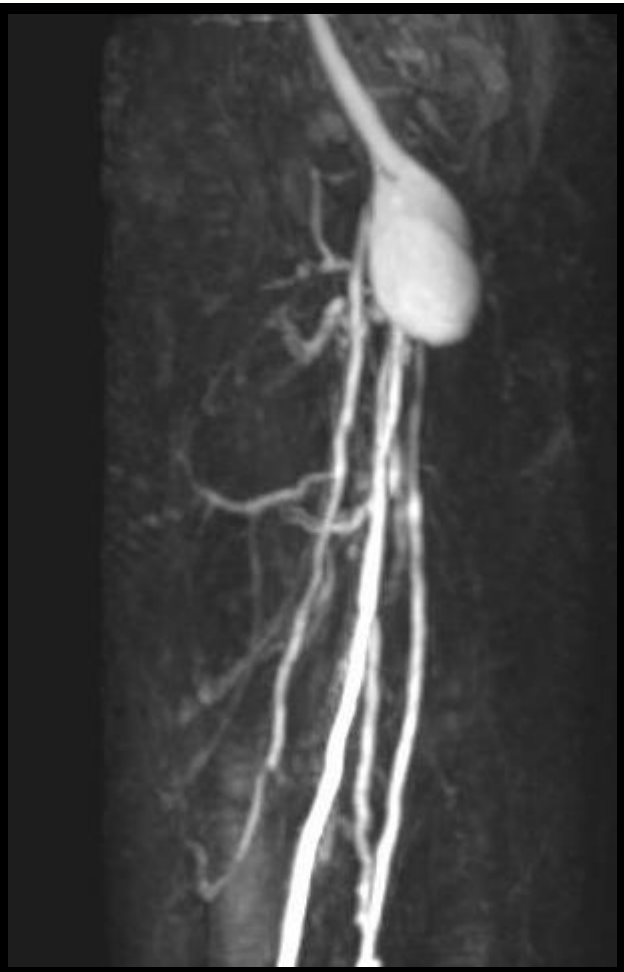
Puncture site bleed- suture closure

Failed closure device – arteriotomy and patch

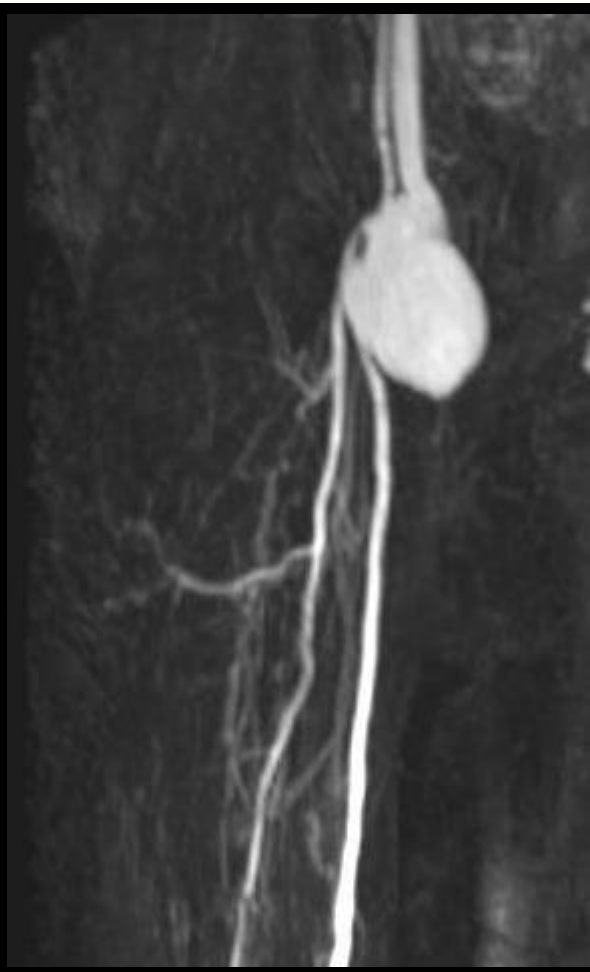
Anastomotic False Aneurysms?

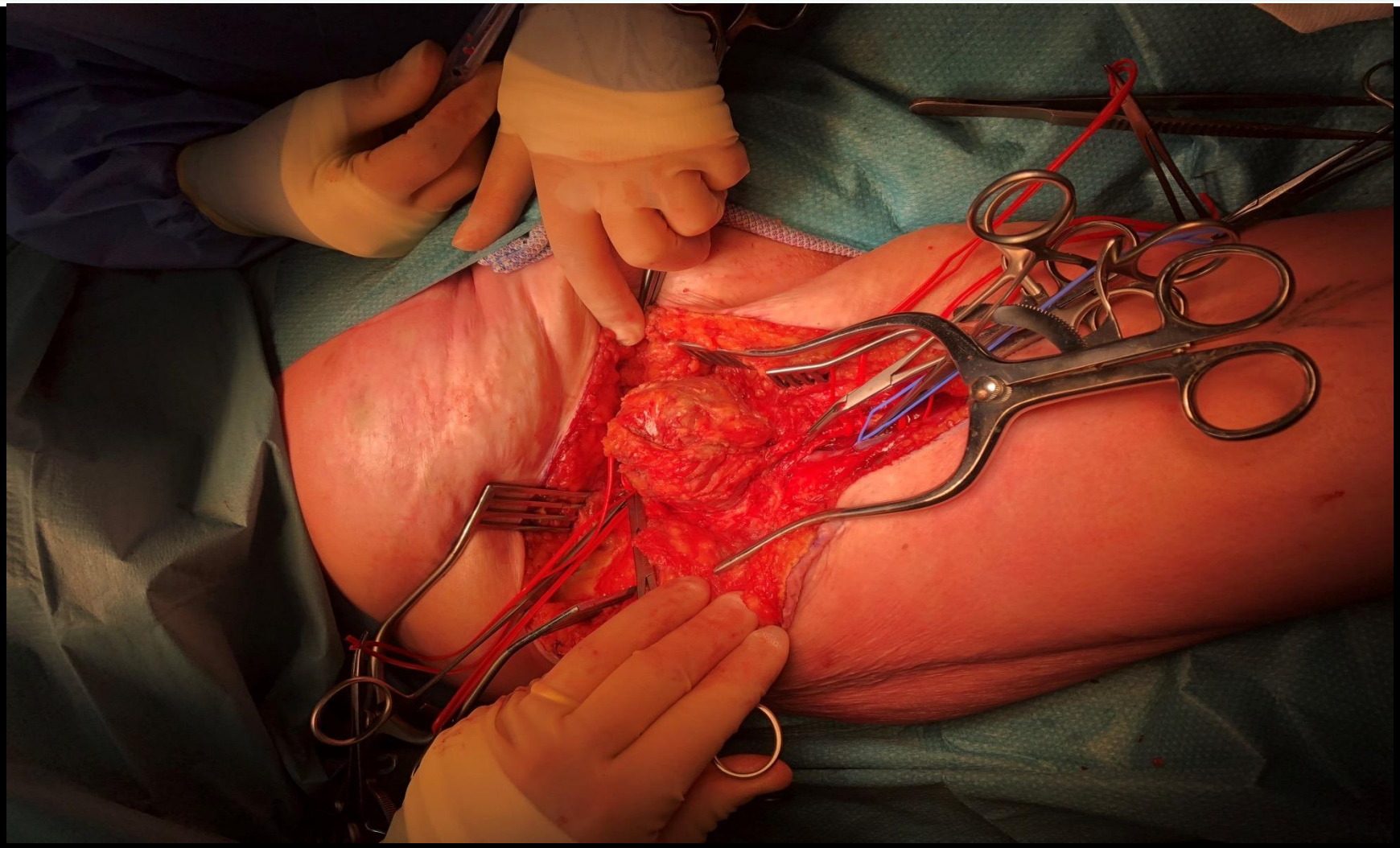
- **Risk of making a come back?**

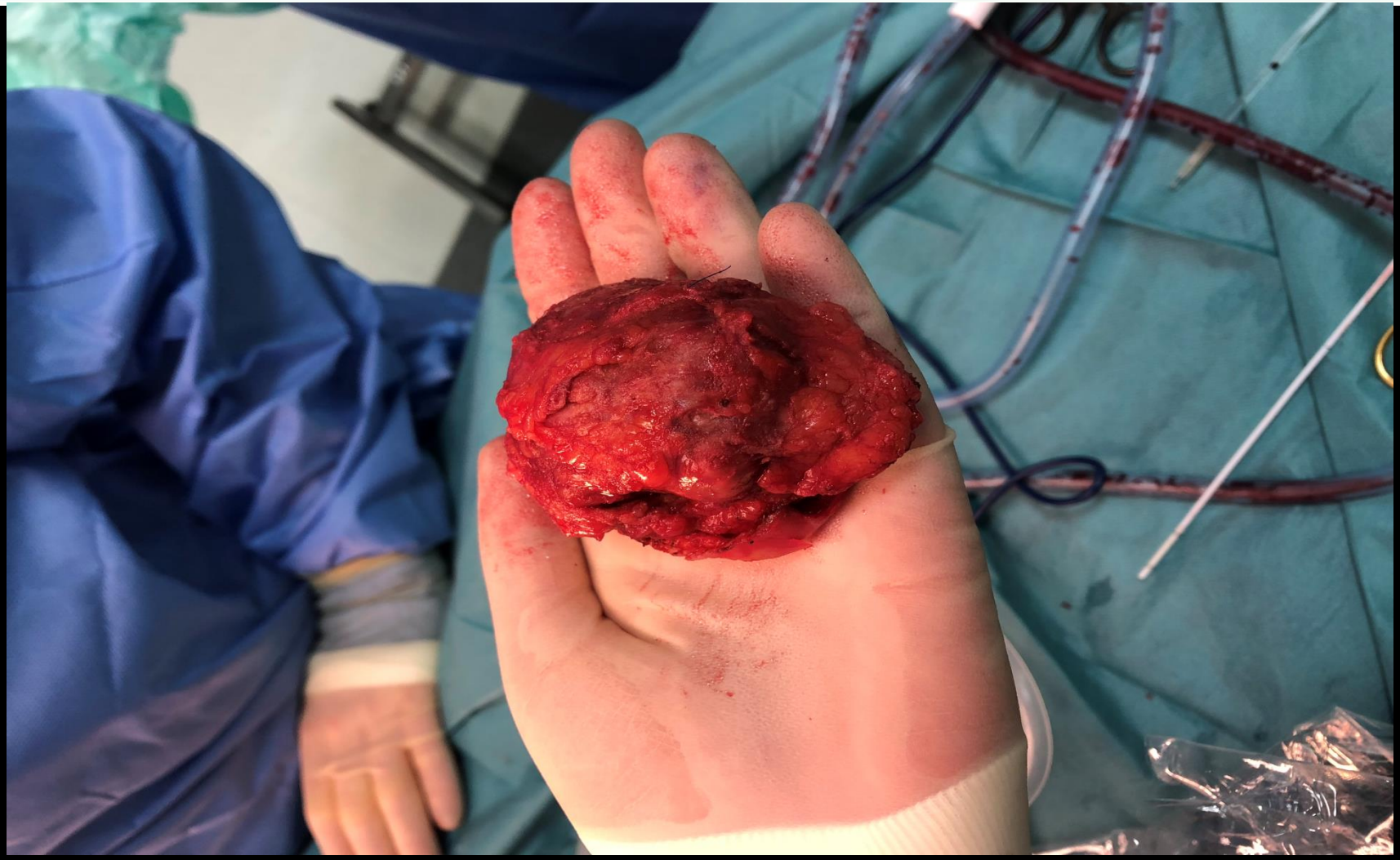
Often concern that these are due to Chronic Infection.
But more likely technical or material related; Suture breakage/ cutting through.

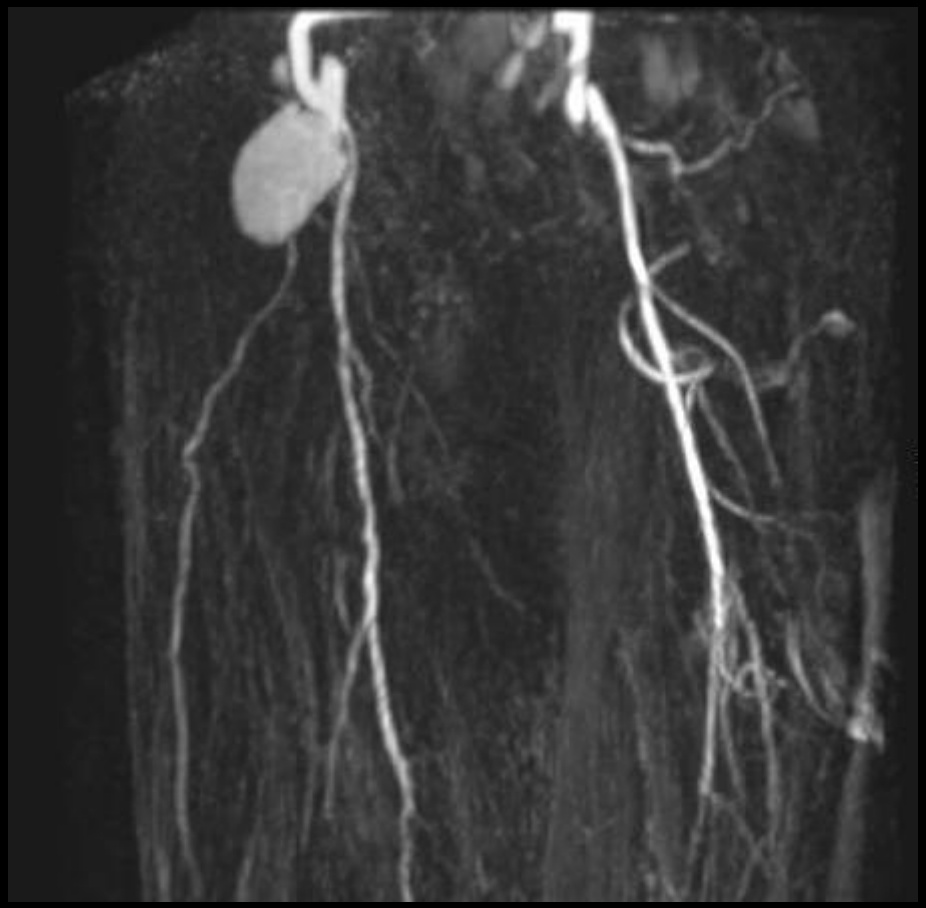


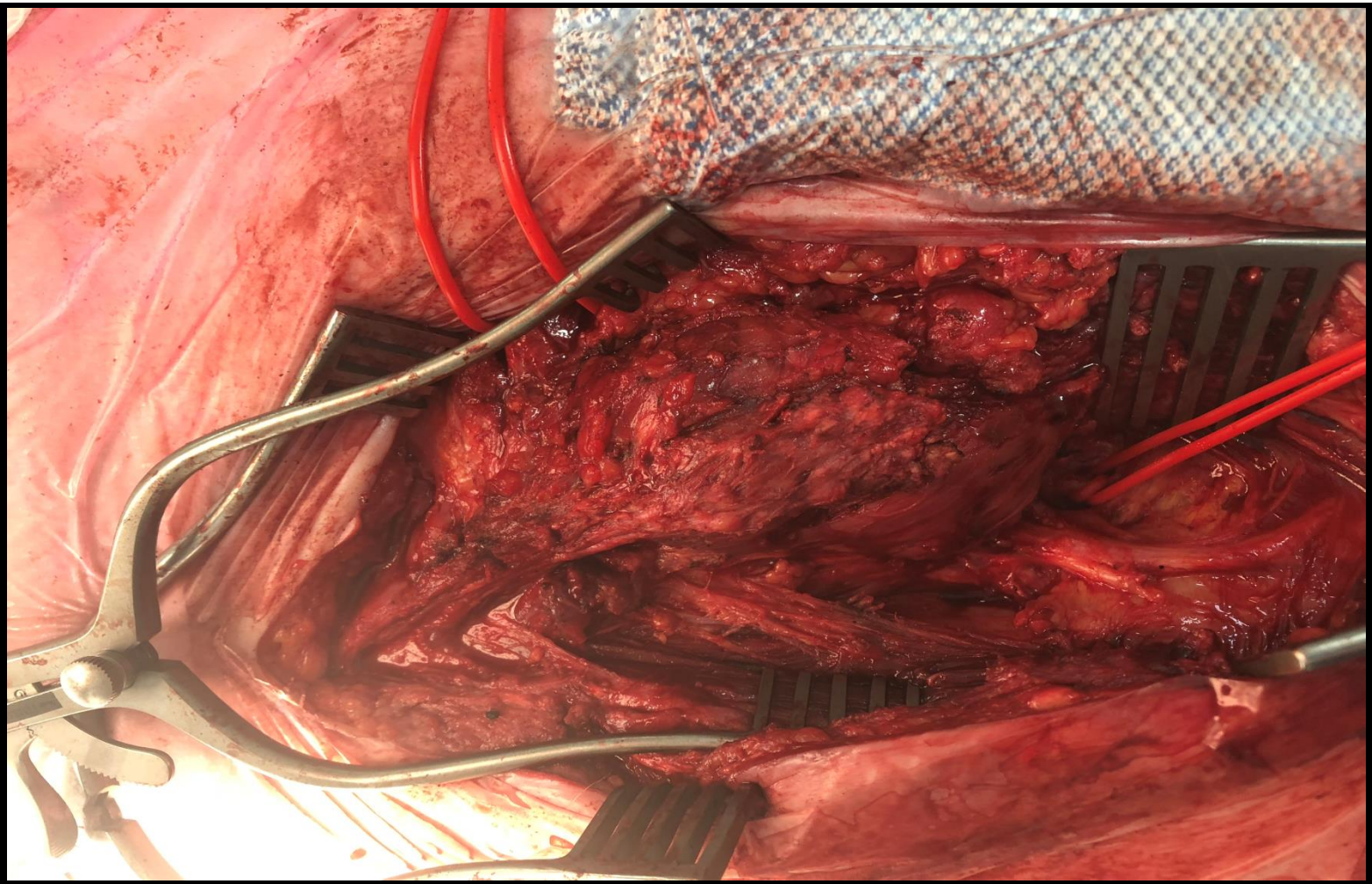
Technically Challenging!

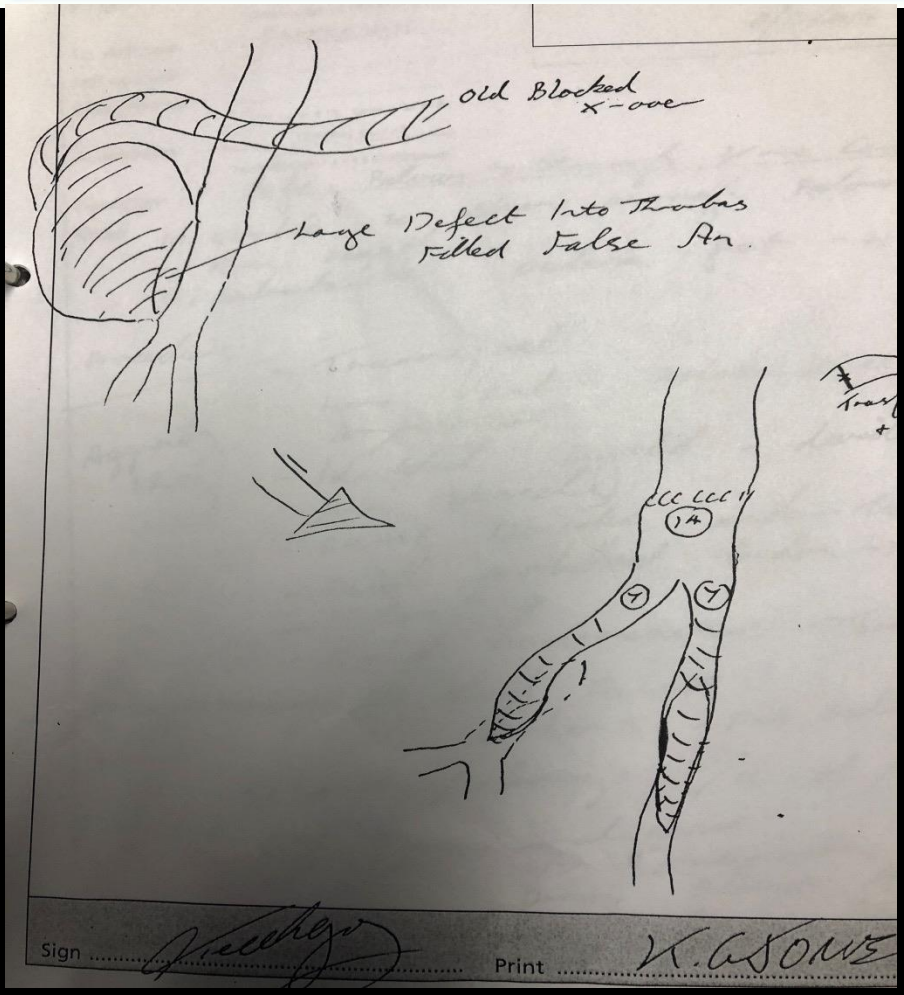












Lateral False Aneurysm at anastomotic site of old cross over

Patent Aorto-femoral limb Controlled-proximally

Silver graft soaked in Rifampicin

Sartorious switch muscle flap coverage.

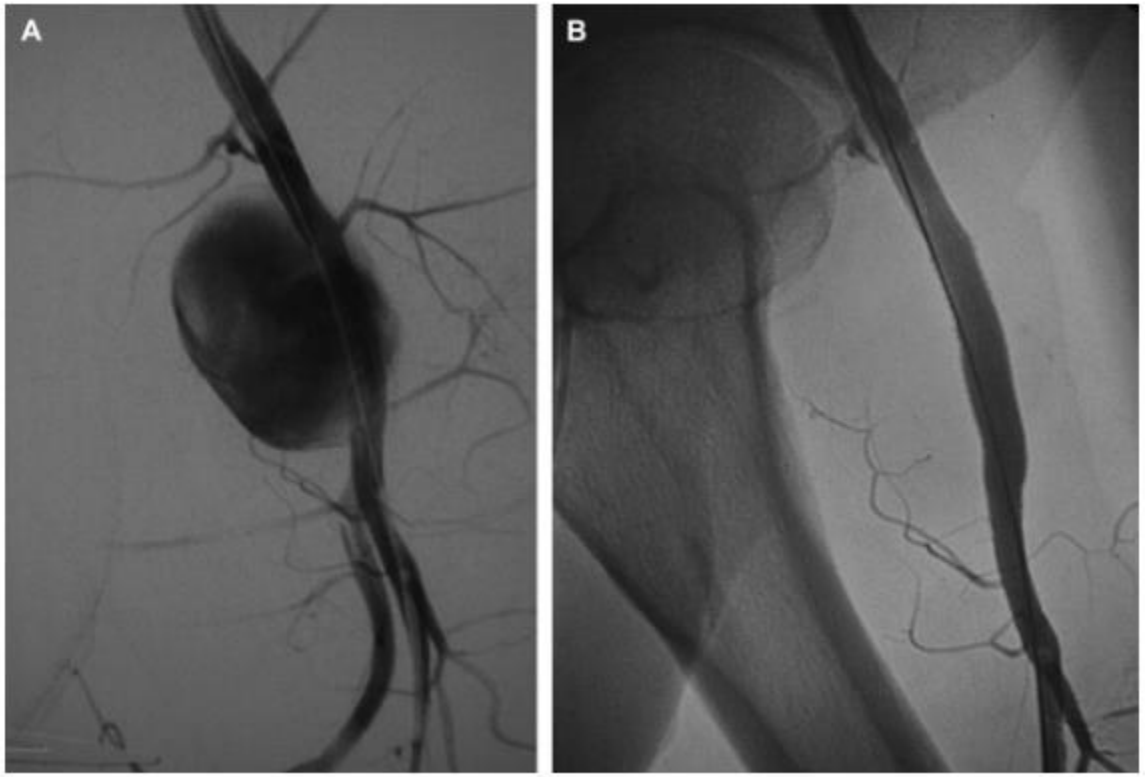
Surgical Plan?

- **Will the pt tolerate intervention or the complications!**

- **Plan your approach / control and have a back up!**
- **Plan the conduit replacement and have a autologous back up!**

- **Expect it to take a long time!**
- **Expect to have to reconstruct a native vessel for an anastomosis**

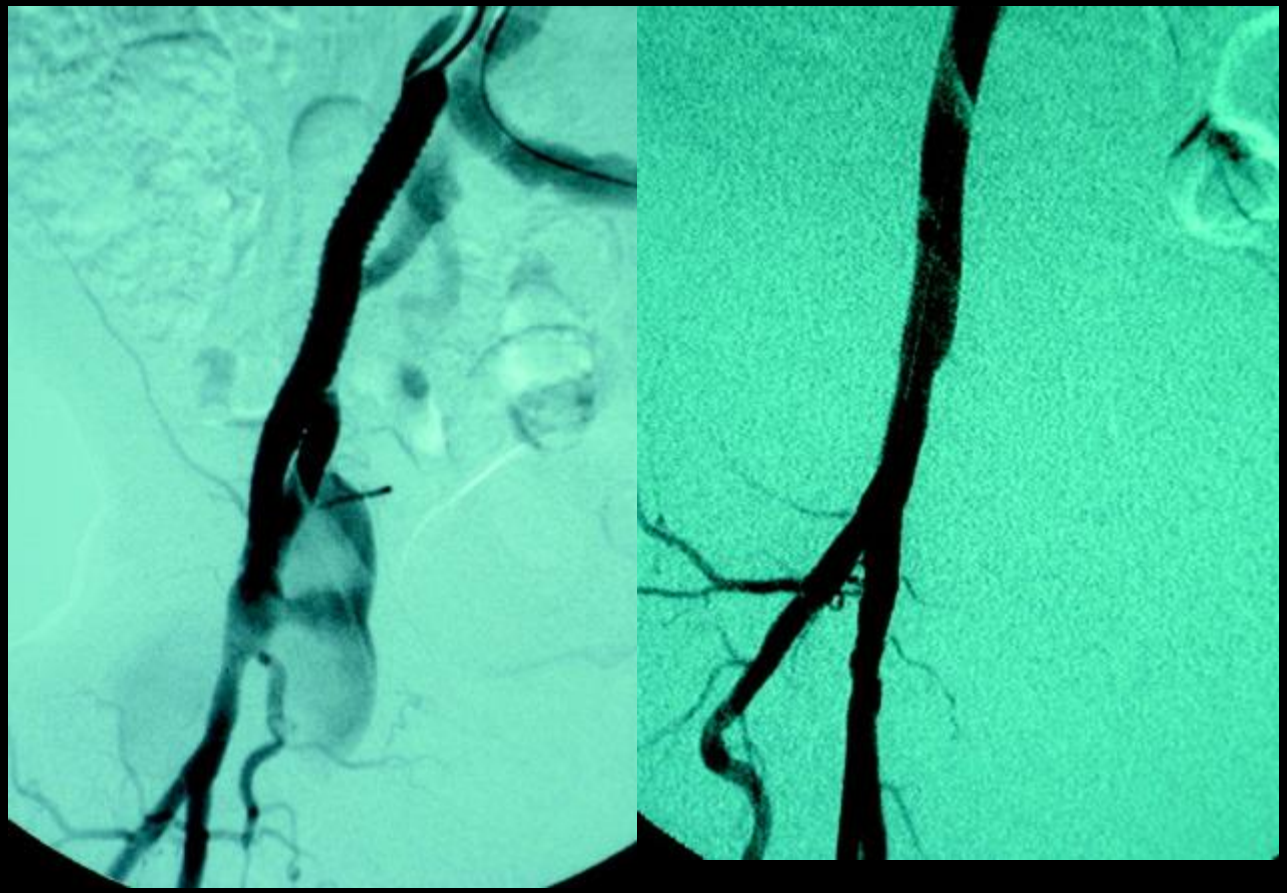
Warn the Anaesthetist



Immuno-suppressed

Ipsilateral access

Endovascular Options

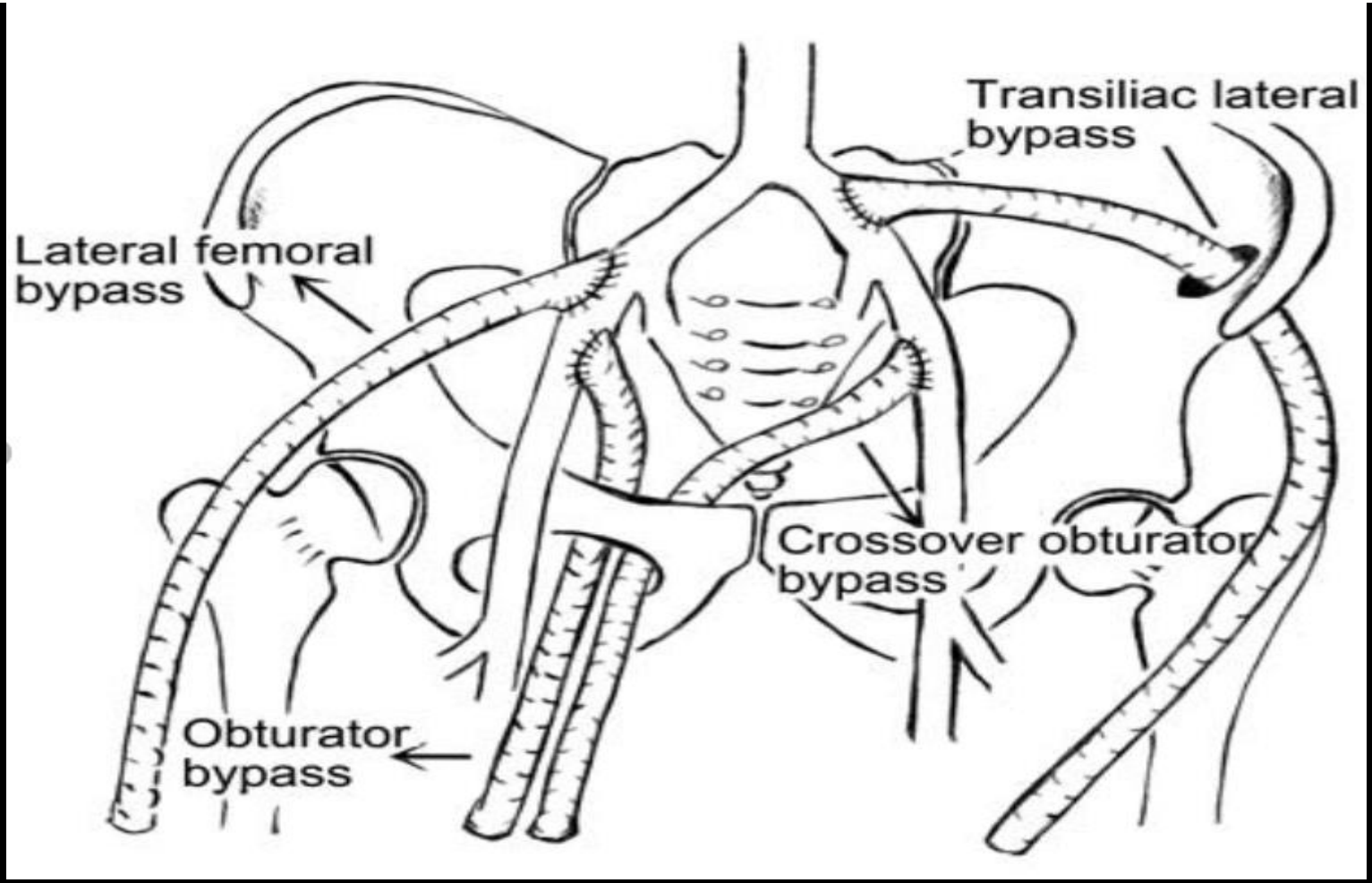


Derom & Nout
EJVS
Dec 2005

Case Series
Of 6 High risk cases.

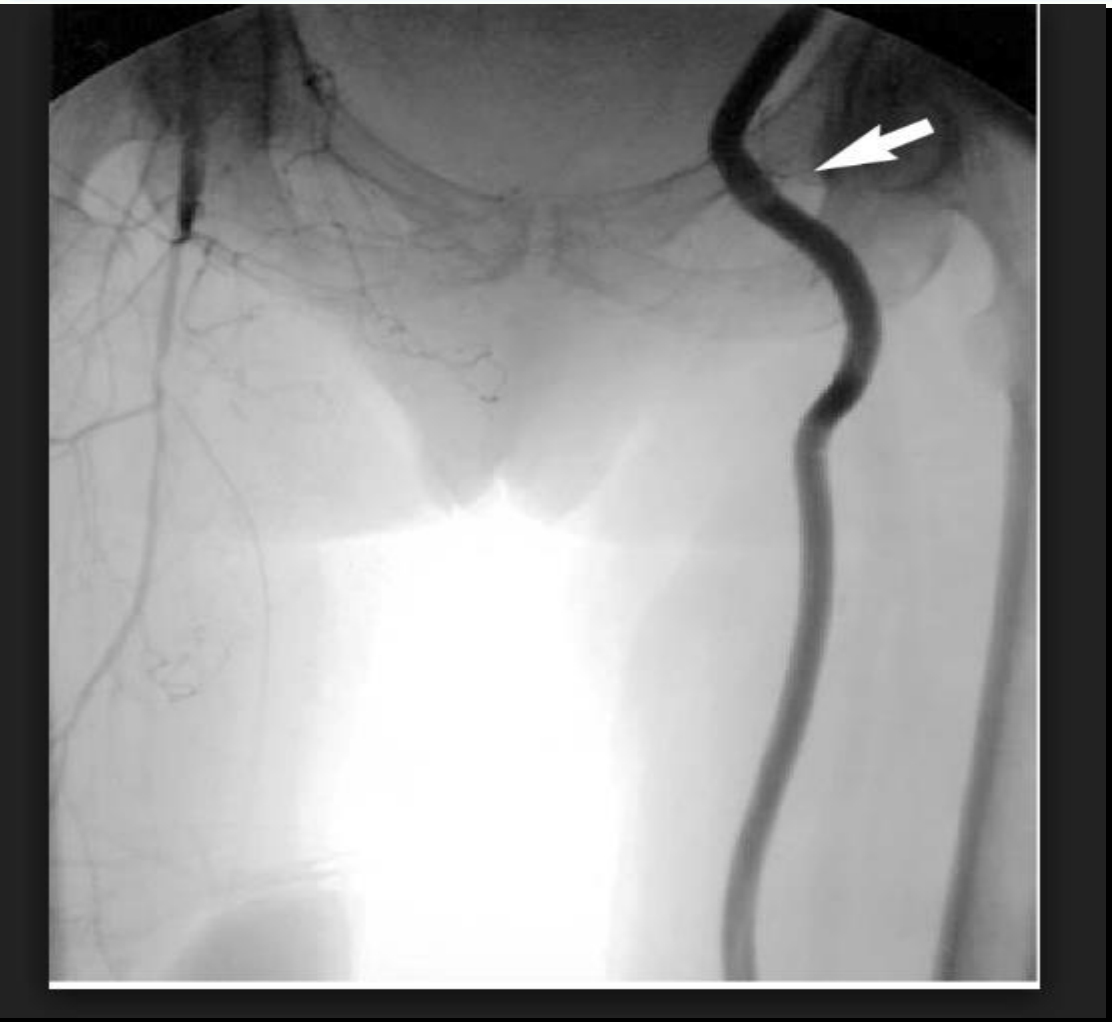
But what if it is infected?

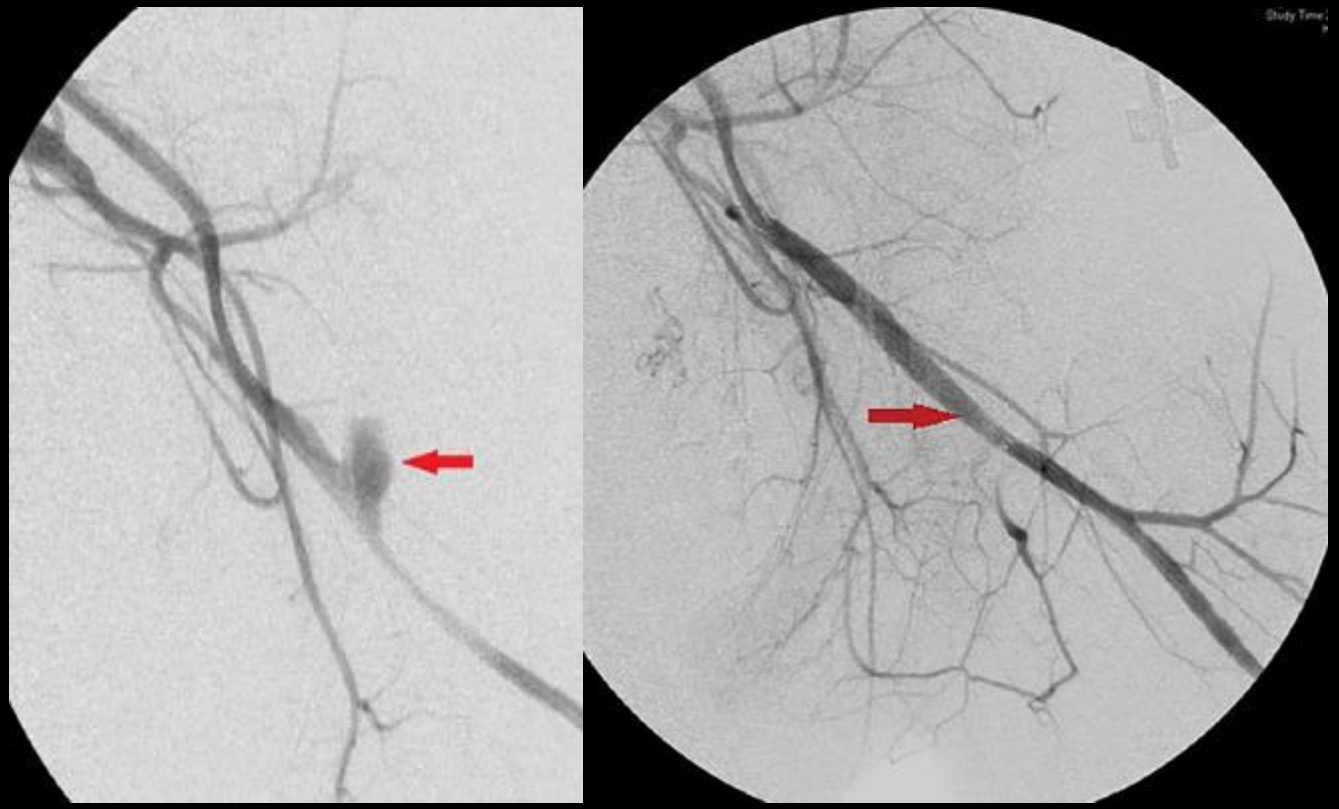
- The prosthetic has to go!
- All the groin vessels sewn over
- Extra anatomical Bypass ideally with vein.
- Can reconstruct SFA/PFA bifurcation distally.


Transiliac lateral bypass
Lateral femoral bypass
Crossover obturator bypass
Obturator bypass

Infected False Aneurysm Post Drug Injection

Vascular Control
Debridement
Primary Ligation
Risk of Amputation ~8%
(worse if all 3 vessels ligated)
Revascularisation~12% risk of amputation
Coughlin EJVS 2006





Endovascular stent control of haemorrhage

Subsequent definitive revascularisation

Ahmad et al IJSCR 2017

Thank You

Any Questions?