

# **A Successful Management Case of a Superficial Femoral Artery Rupture induced by High Pressure Non-Compliant Ballooning**

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# Clinical history

- Sex/Age; Male 63-year old
- CC; Deep non-healing ulcer on his right 5<sup>th</sup> toe (Rutherford class 5).
- Past History; diabetes , hypertension, and chronic kidney disease (on peritoneal dialysis).
- On Physical examination;
  - 1) peripheral pulses were diminished
  - 2) non-healing ulcer on right 5th toe.



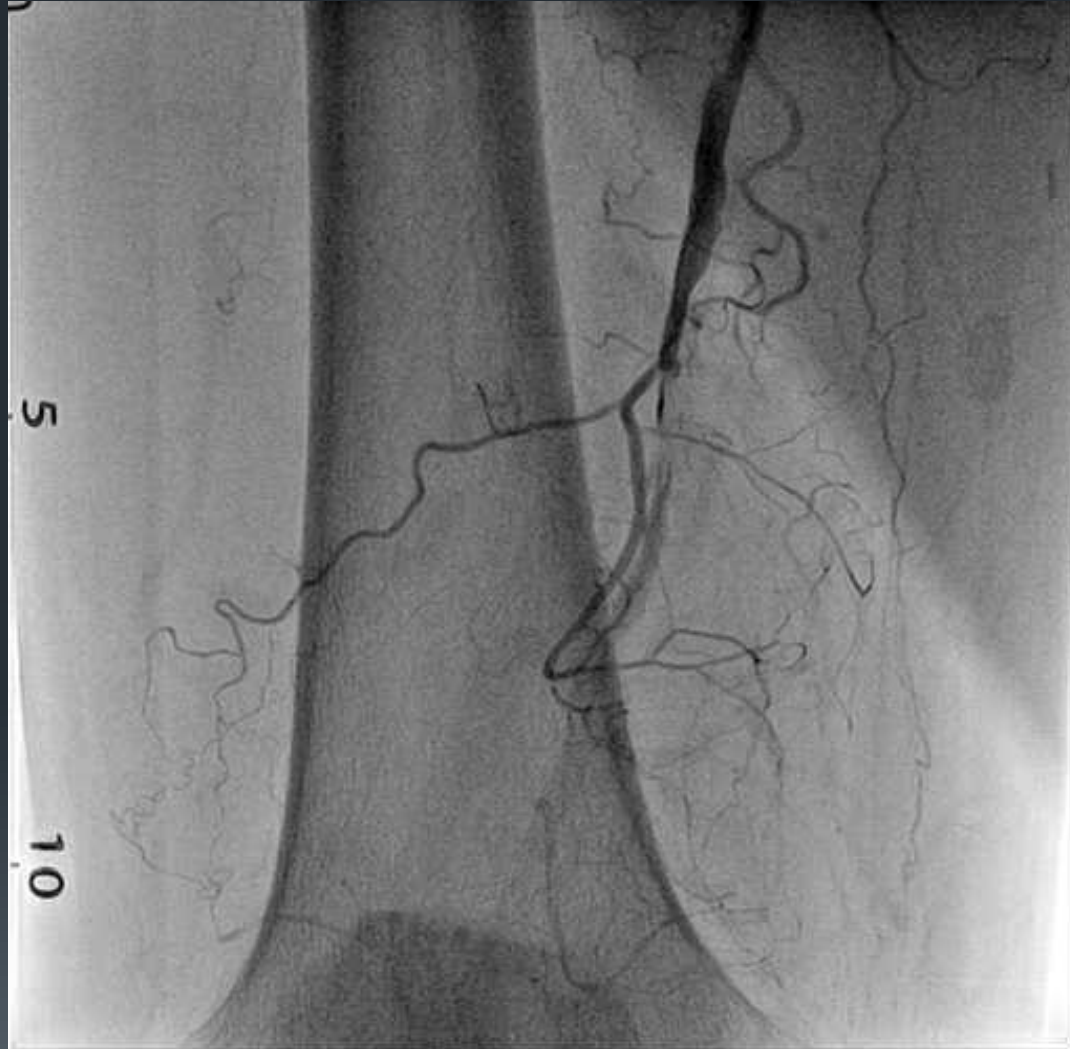
## Non-invasive tests

- Ankle-brachial index (ABI) was below 0.6 on right side.
- His computerized tomography (CT) angiogram showed total occlusion from right distal superficial femoral artery (SFA) to popliteal artery.

# CT Angiography

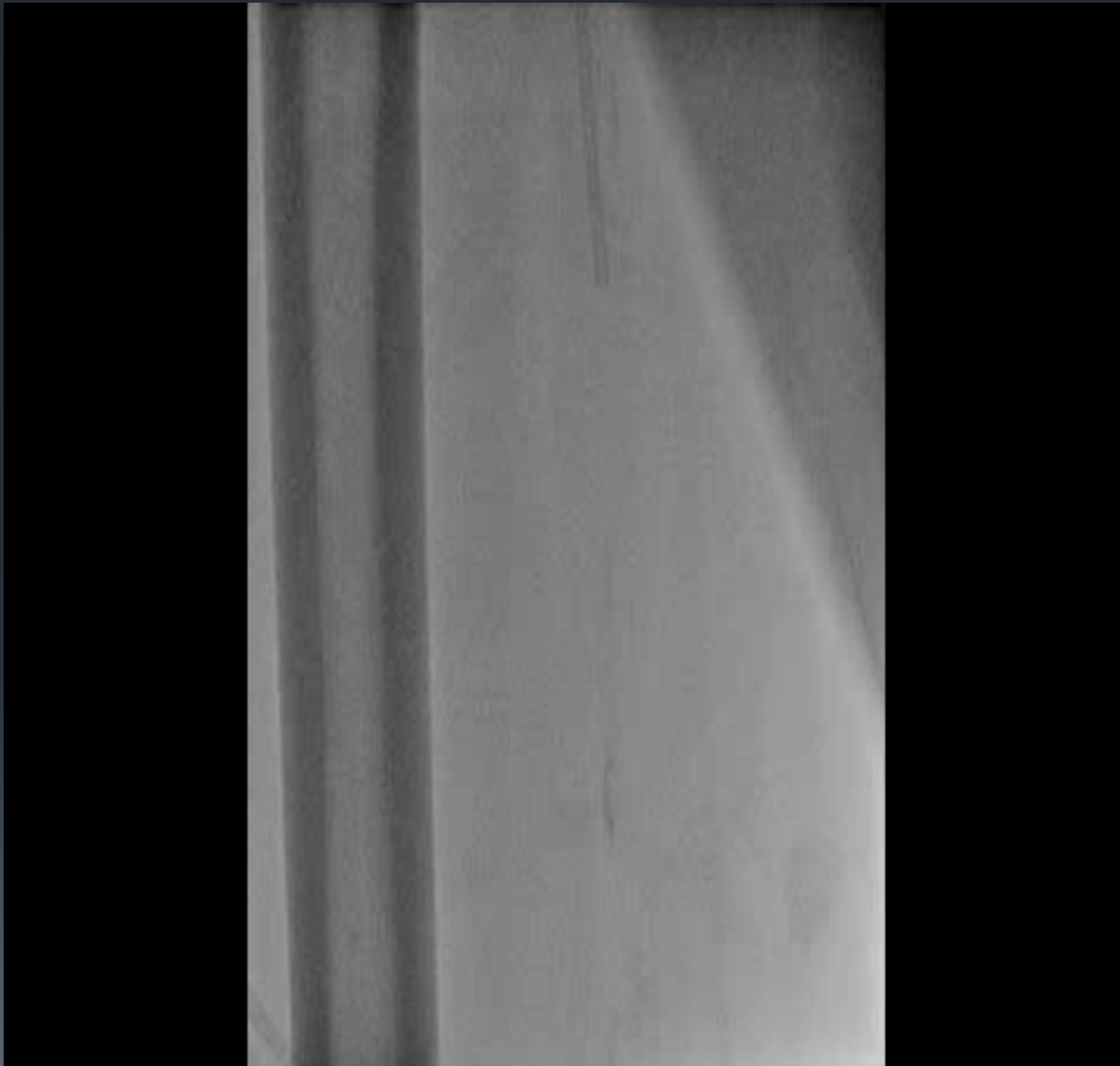


# Invasive angiography



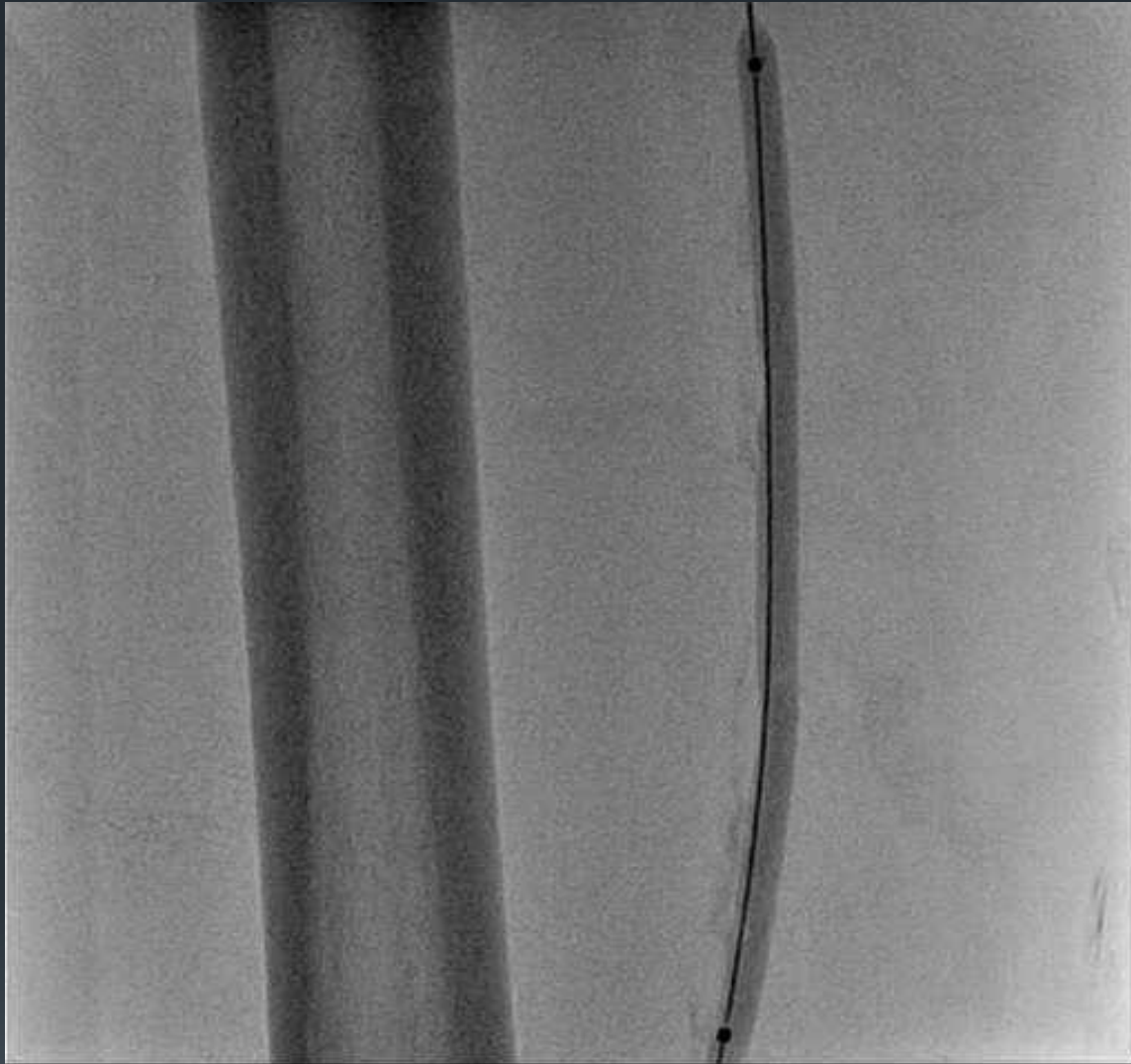
**Total obstruction of right distal SFA to popliteal artery**

# Baseline Angiography





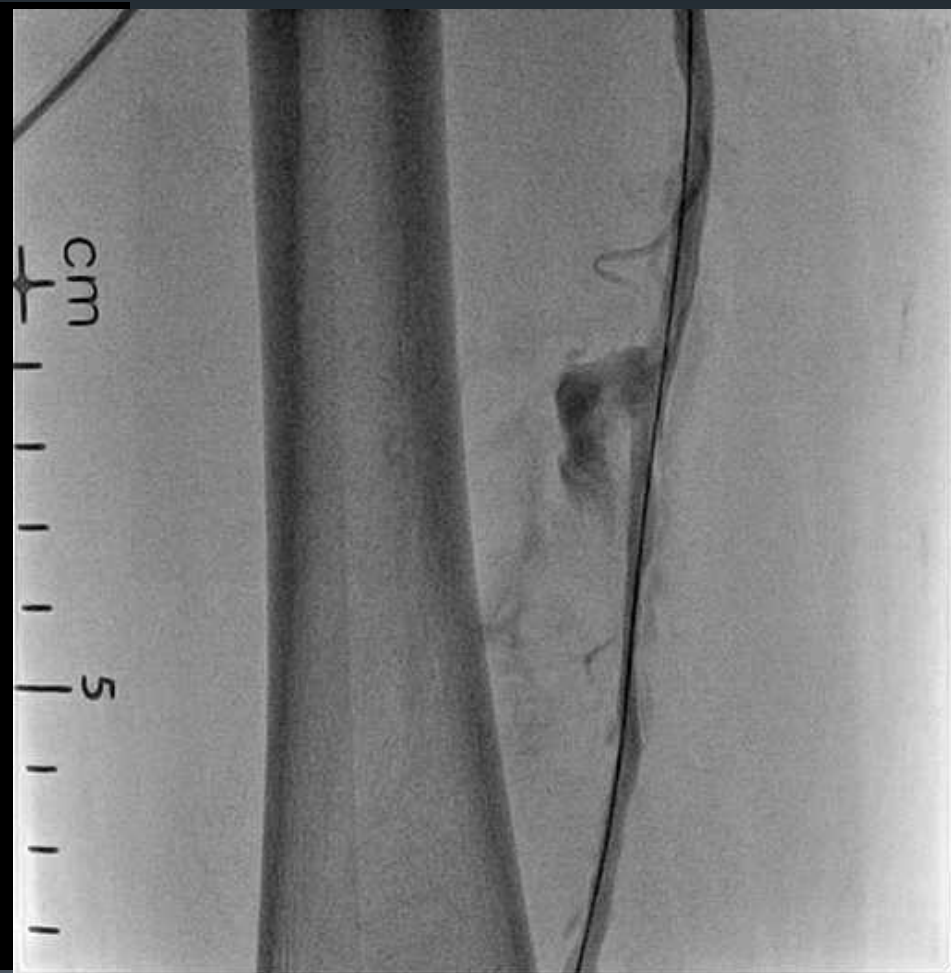
Balloon dilation with Inpact balloon 5.0x130mm

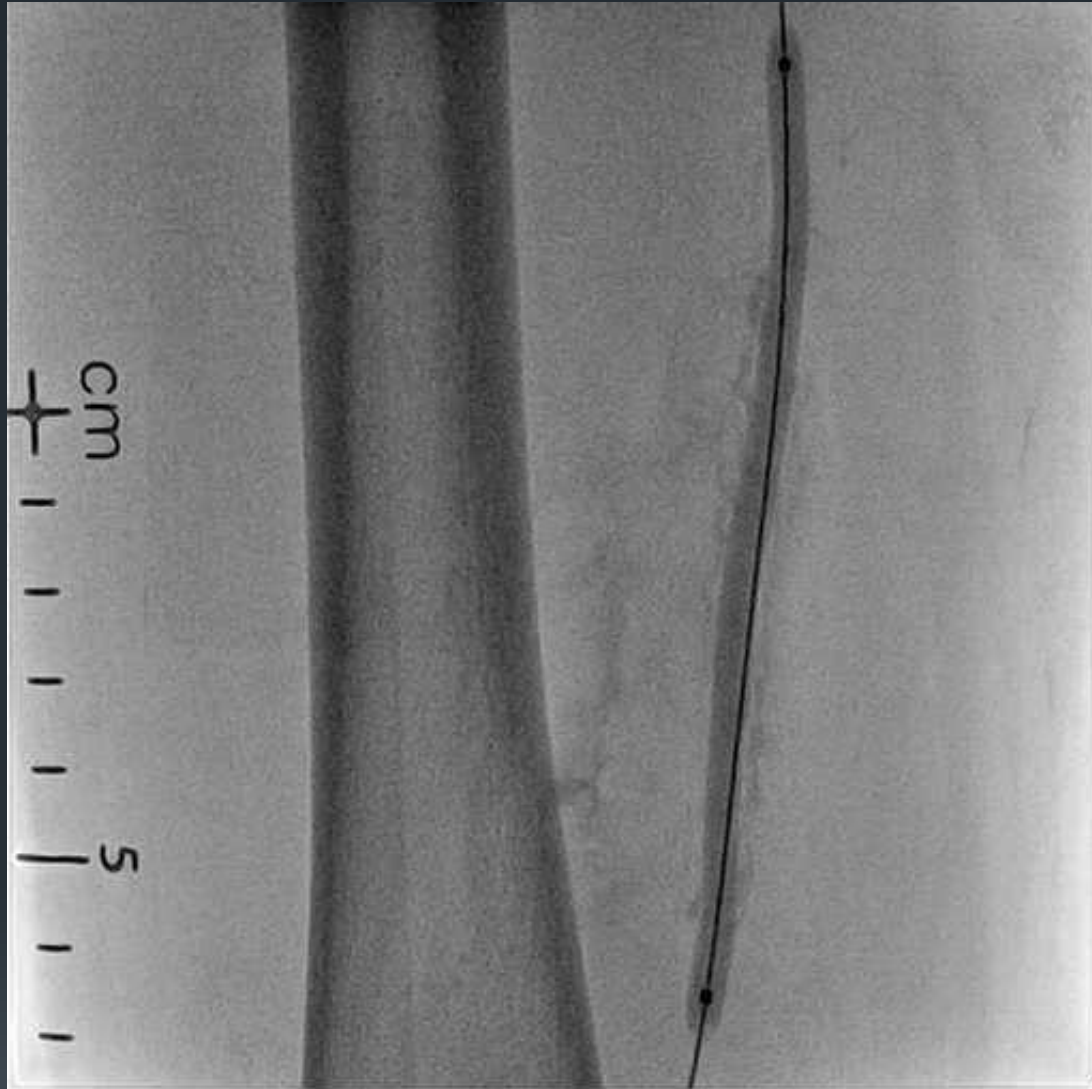


Follow-up angiogram showed focal dissection and additional ballooning was performed with Mustang 6.0x80mm at 24 ATM for 120 seconds.



# Post High-Pressure NC Ballooning

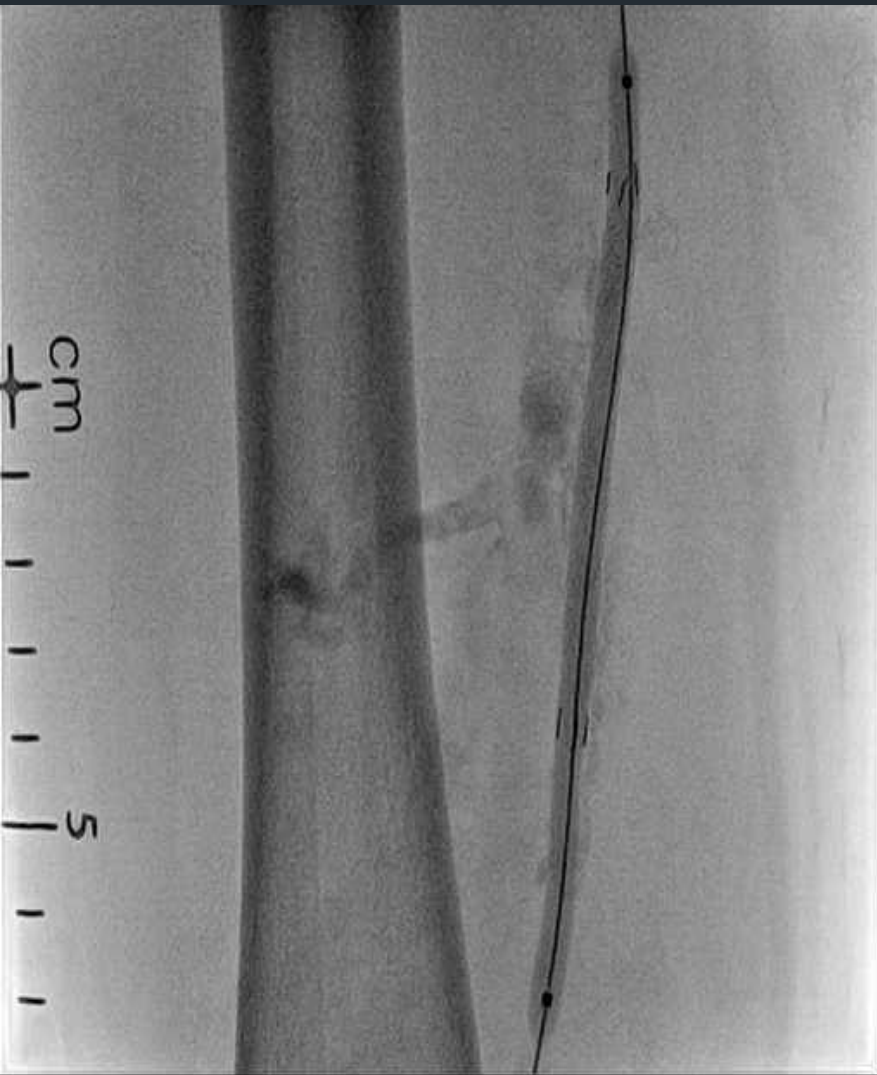




Immediate prolonged balloon tamponade was attempted with Inpact balloon 5.0x130mm at 6 ATM for 180s, but due to large rupture base, bleeding continued



Sheath was changed to 8F, and 8.0X60mm self-expanding S&G stentgraft (Korea) was deployed successfully at SFA rupture site

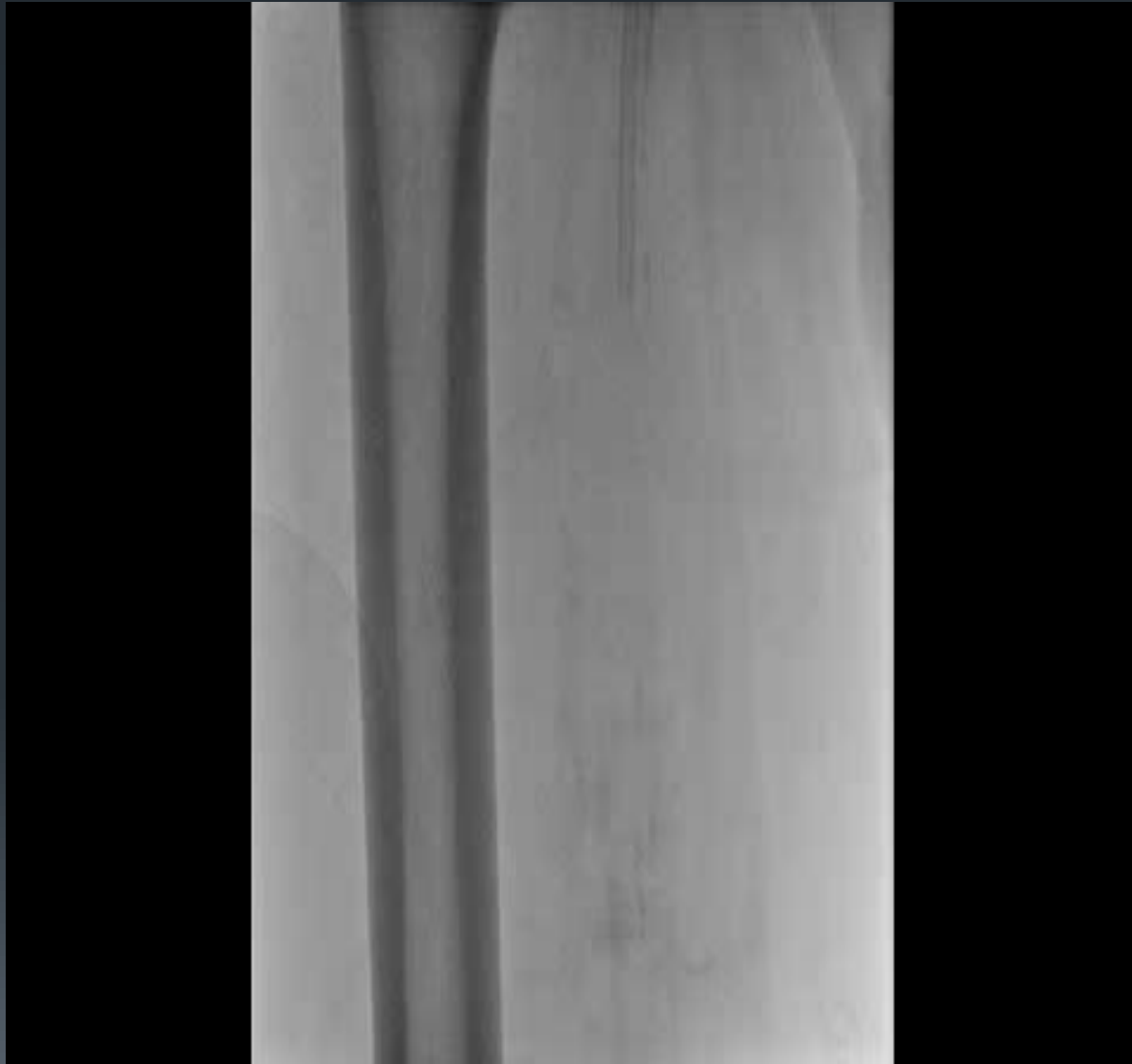


Inpact balloon 5.0x130  
at 6 ATM for 180 second.



Follow-up angiogram showed complete  
cession of contrast extravasation

# Final Angiography



# Discussions



1. Risks and benefits of adjuvant ballooning with high-pressure ; semi compliant vs. non-compliant balloon?
2. What were the probable reasons for femoral arterial rupture?
  - a) vessel factors; heavy calcifications
  - b) balloon/technical issues; NC balloons, Oversize, High-pressure
  - c) indigenous problem of vessel wall?
3. Treatment option in sudden femoral artery rupture case?
4. How to prevent?

# Thank you for your attention!!

“Good judgment comes from experience and  
experience comes from bad judgment.”

-- Unknown --

