Percutaneous Reconstruction of SFA

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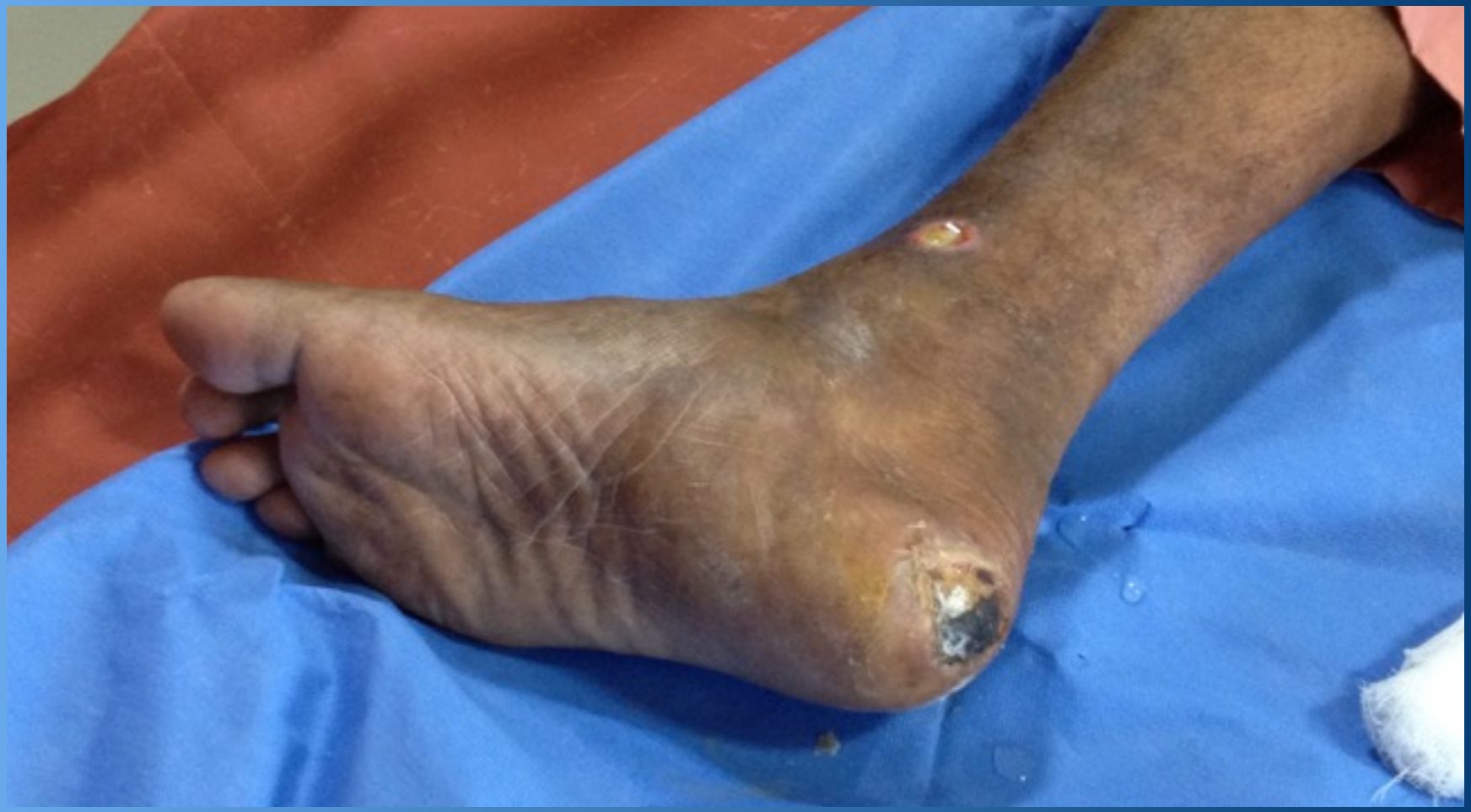
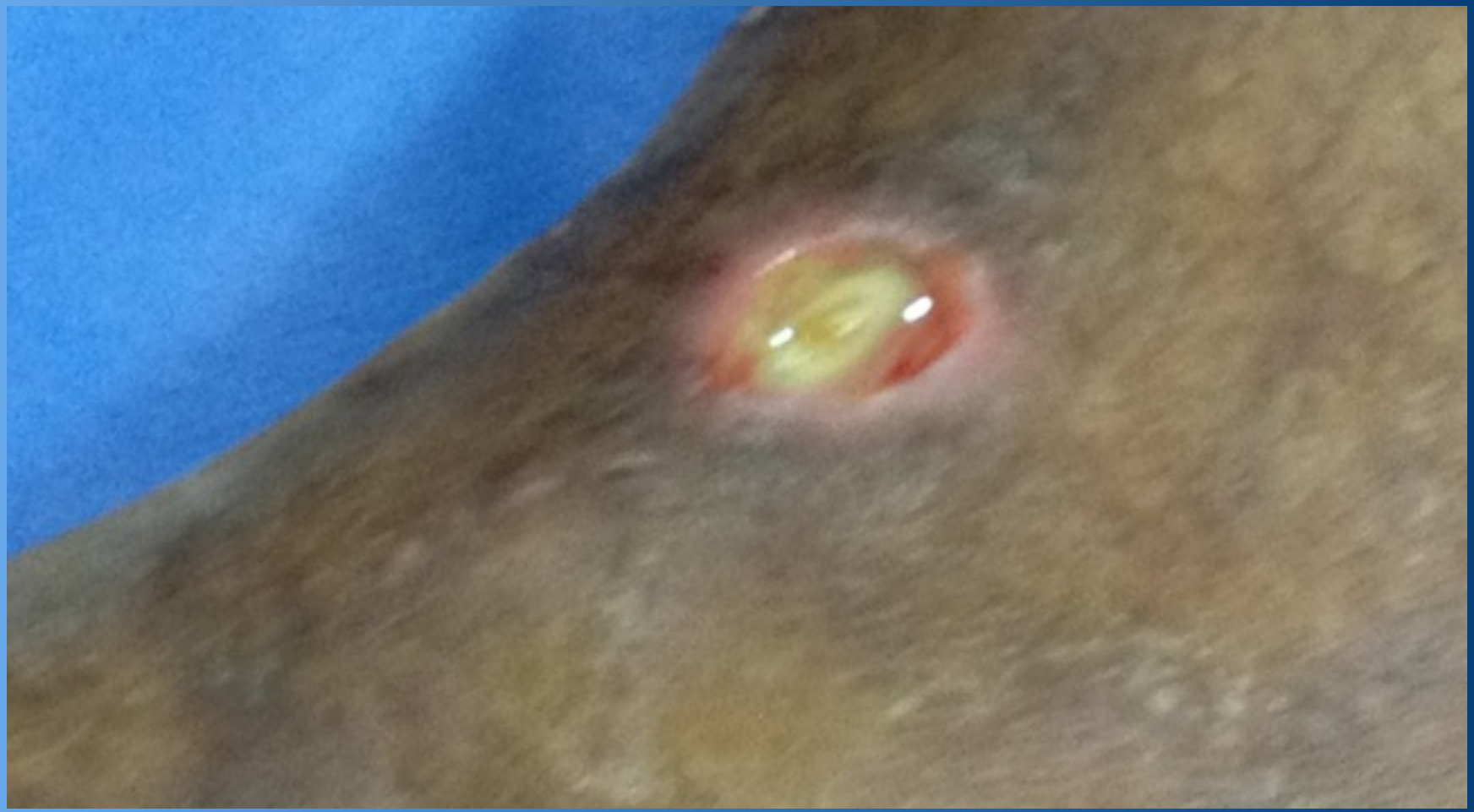
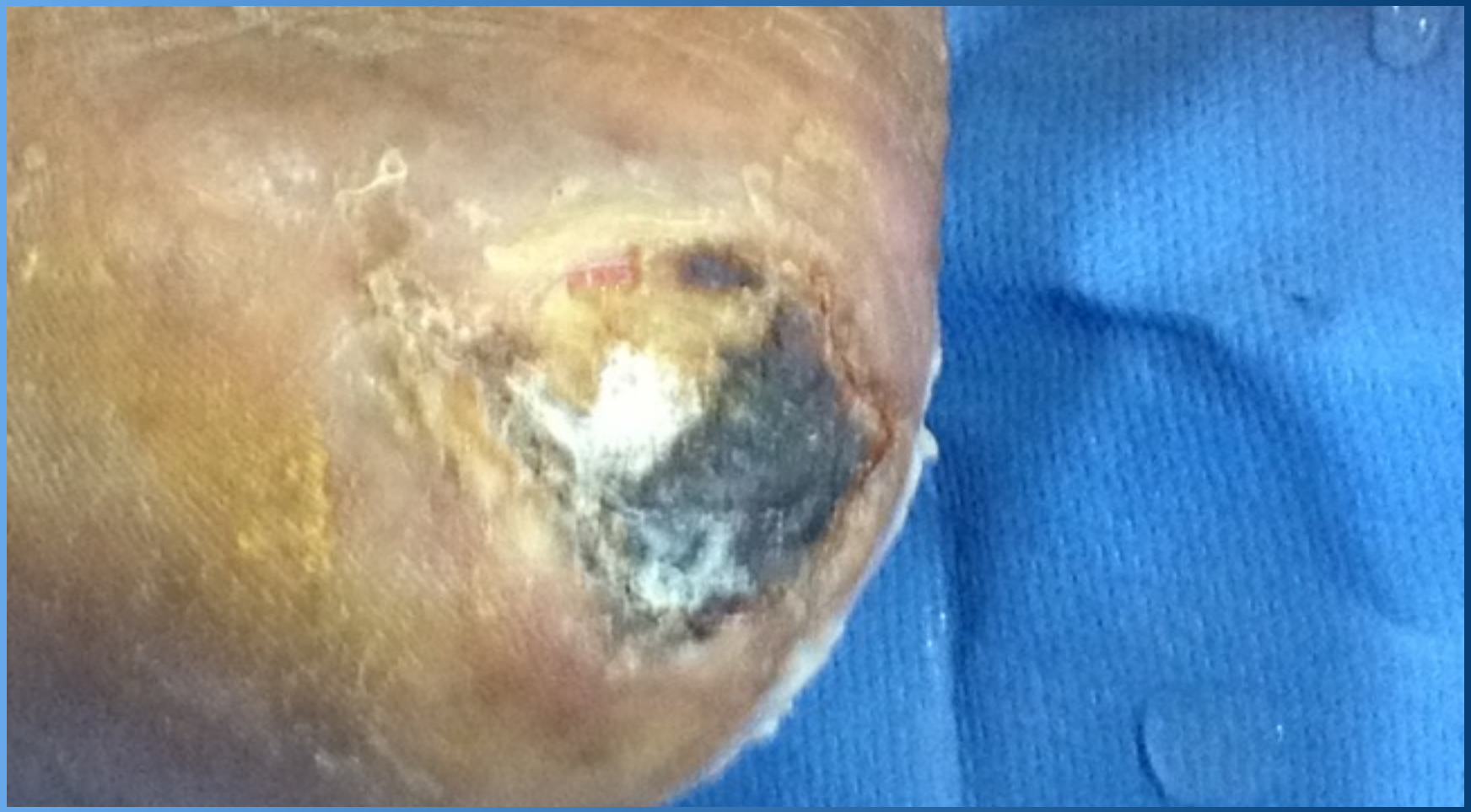
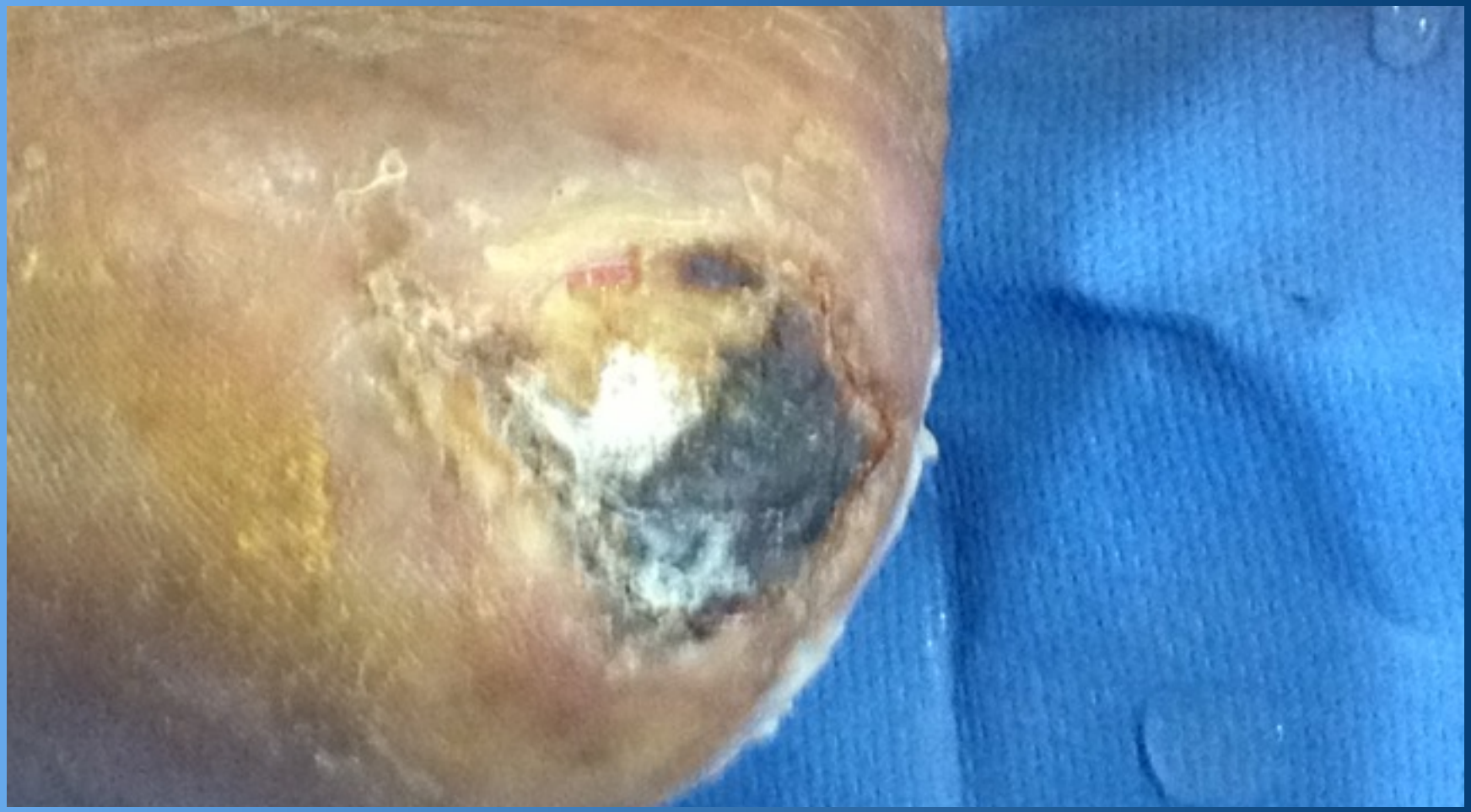
History

- 80 yr old Hypertensive
- S/P Renal angioplasty 1 yr
- Severe TVD on medical f/u
- POVD
- Nonhealing ulcer rt shin and heel
- Severe ischaemic rest pain 3 weeks

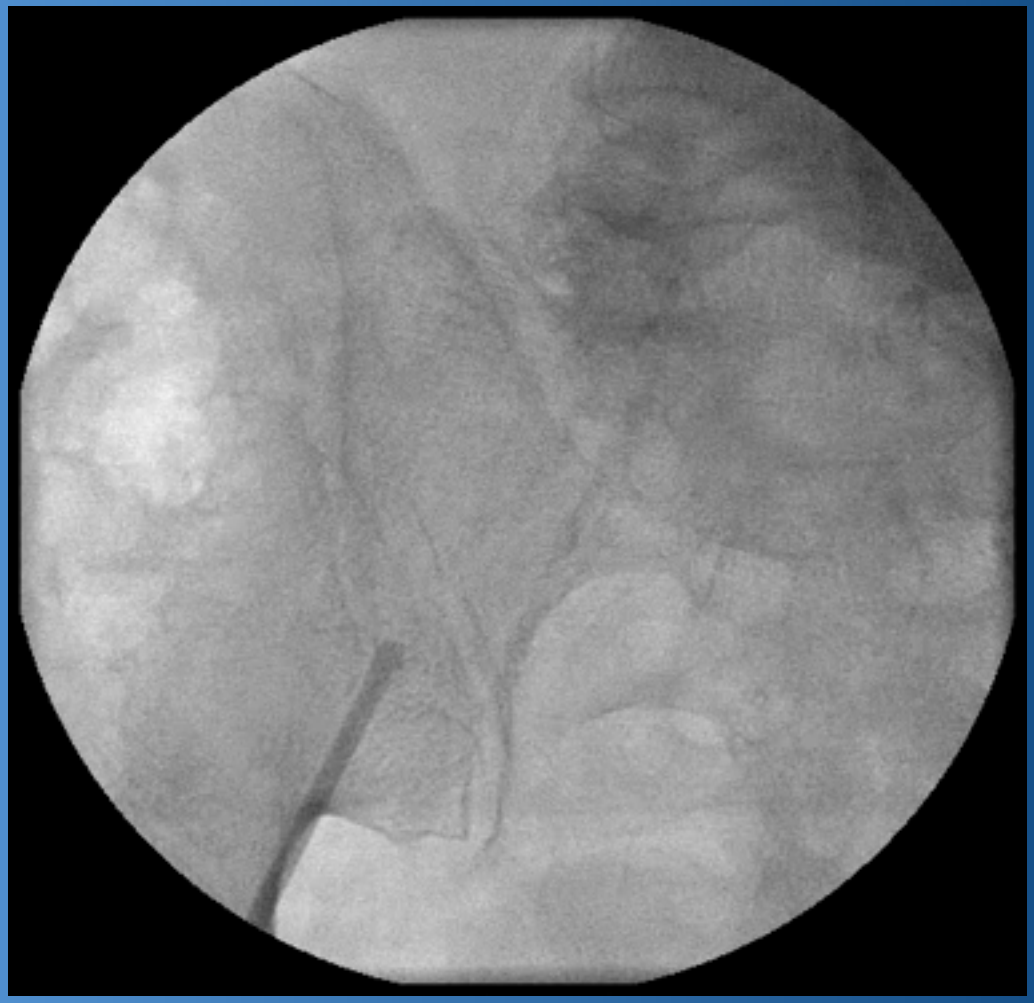


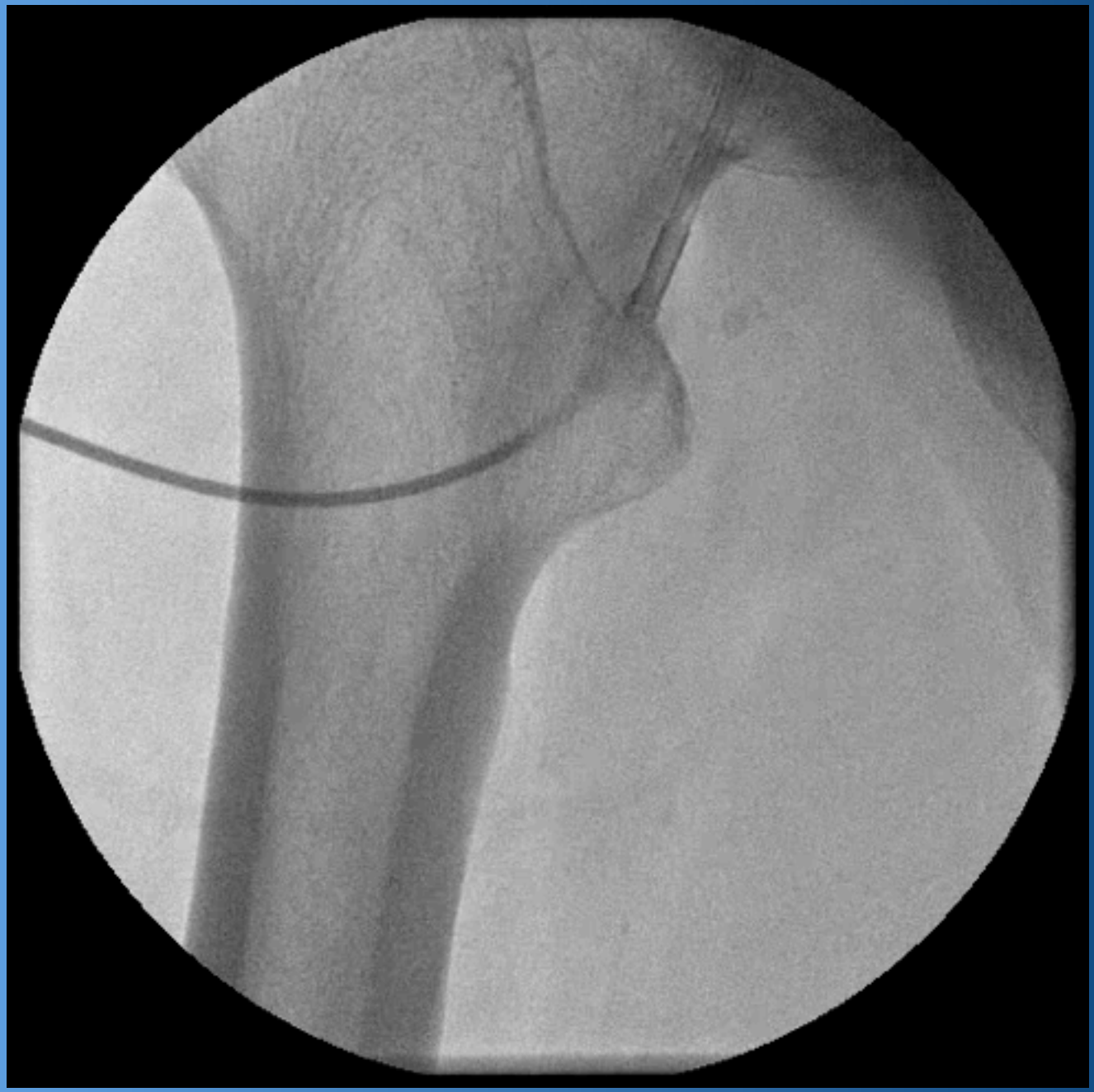


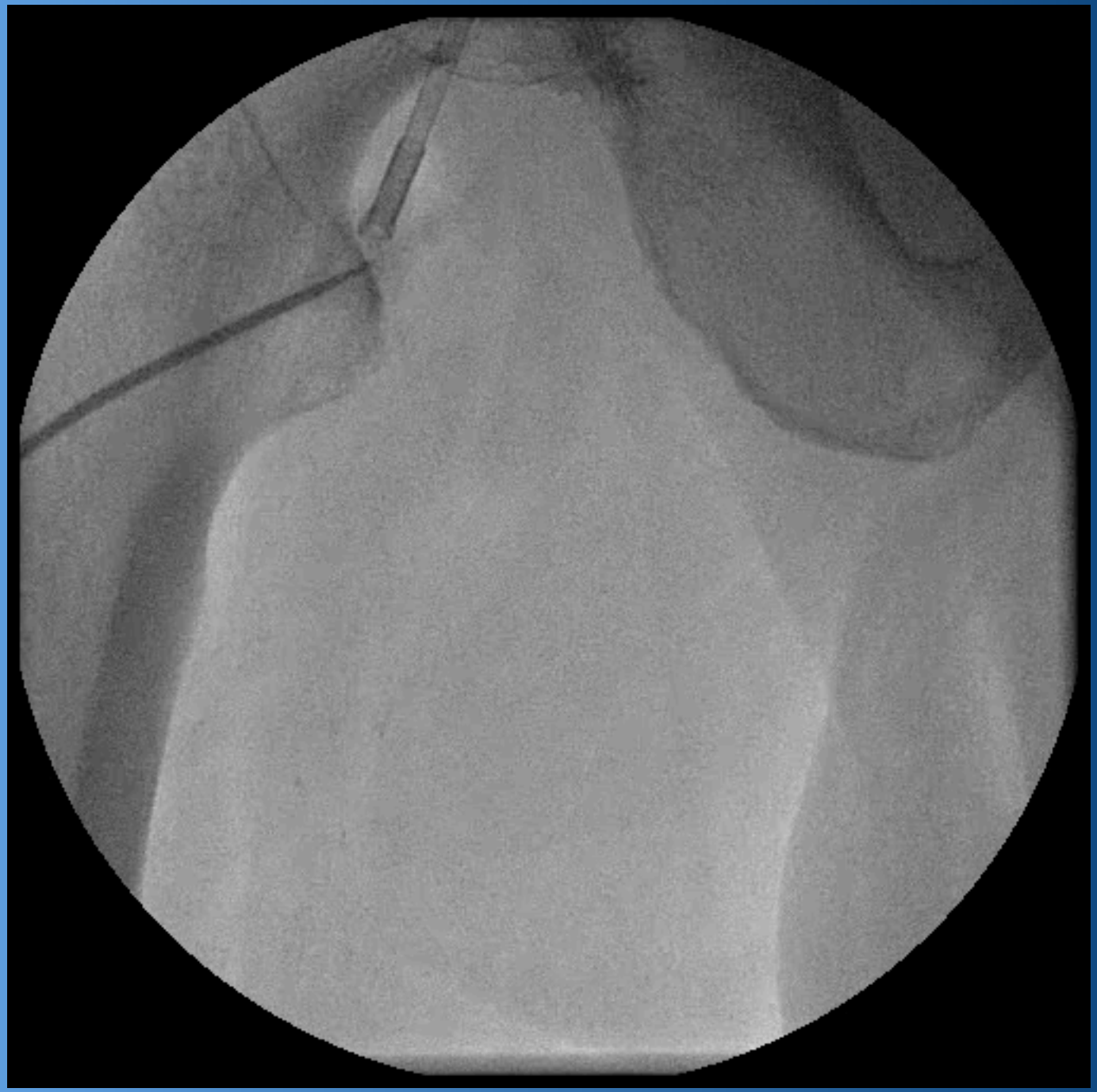




Diagnostic Angio

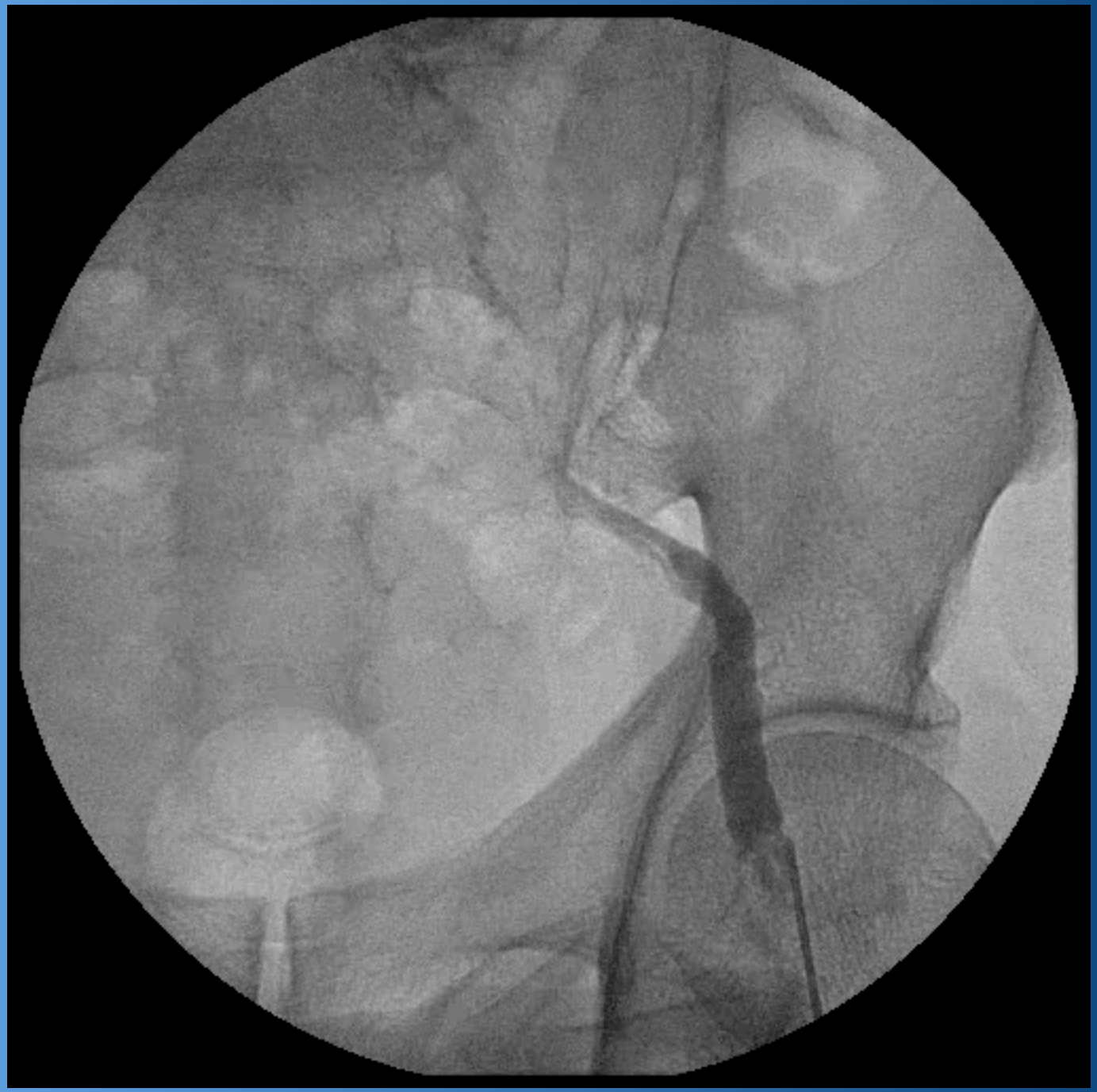






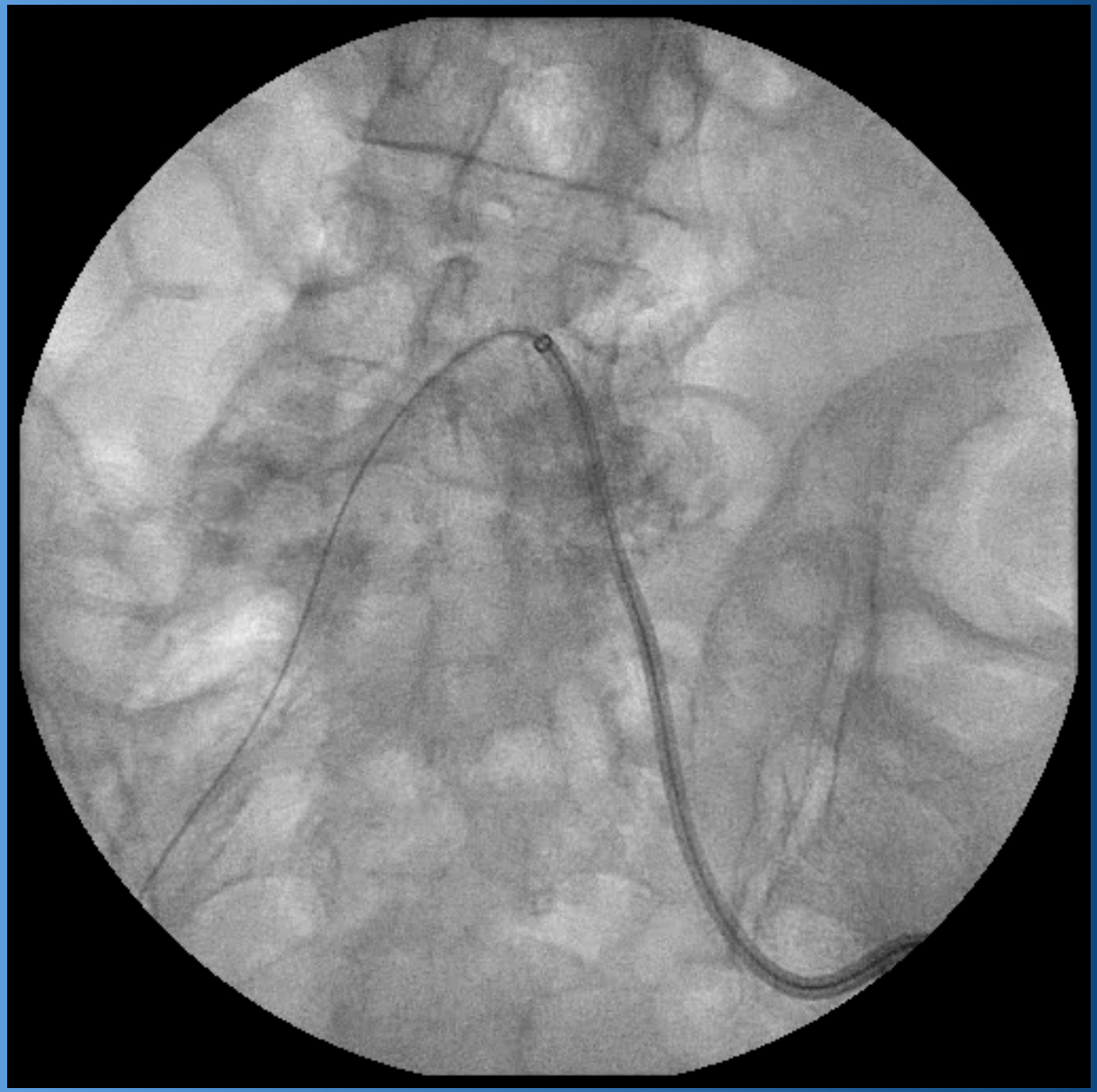
An impossible looking CTO

- Starting immediately after origin of SFA
- There is a stump
- Reformation at distal end of adductor canal just proximal to popliteal
- Surgery out of question in view of age TVD and LV dysfunction
- Amputation will definitely be AK and no good profunda support



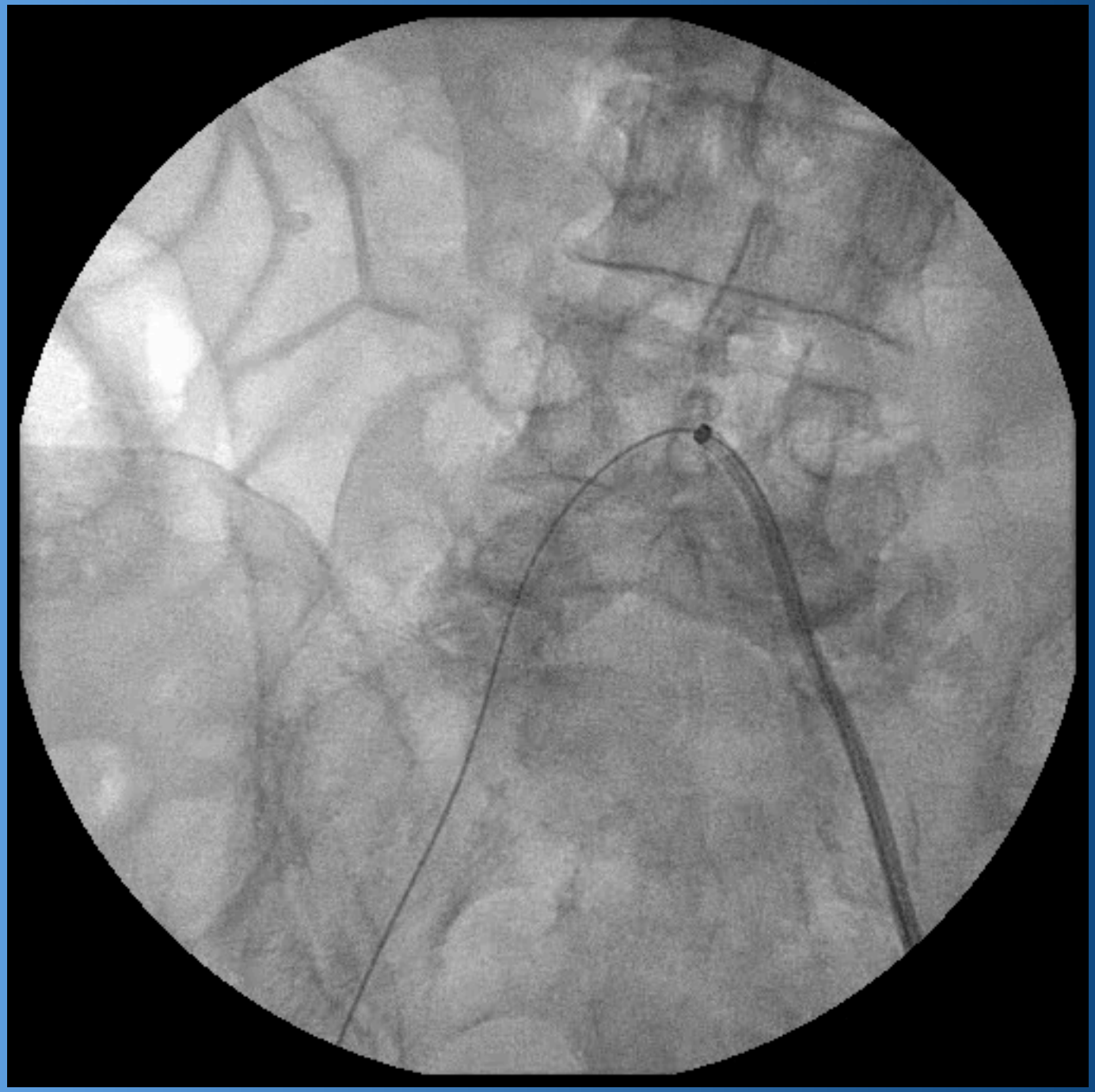
PTA decided

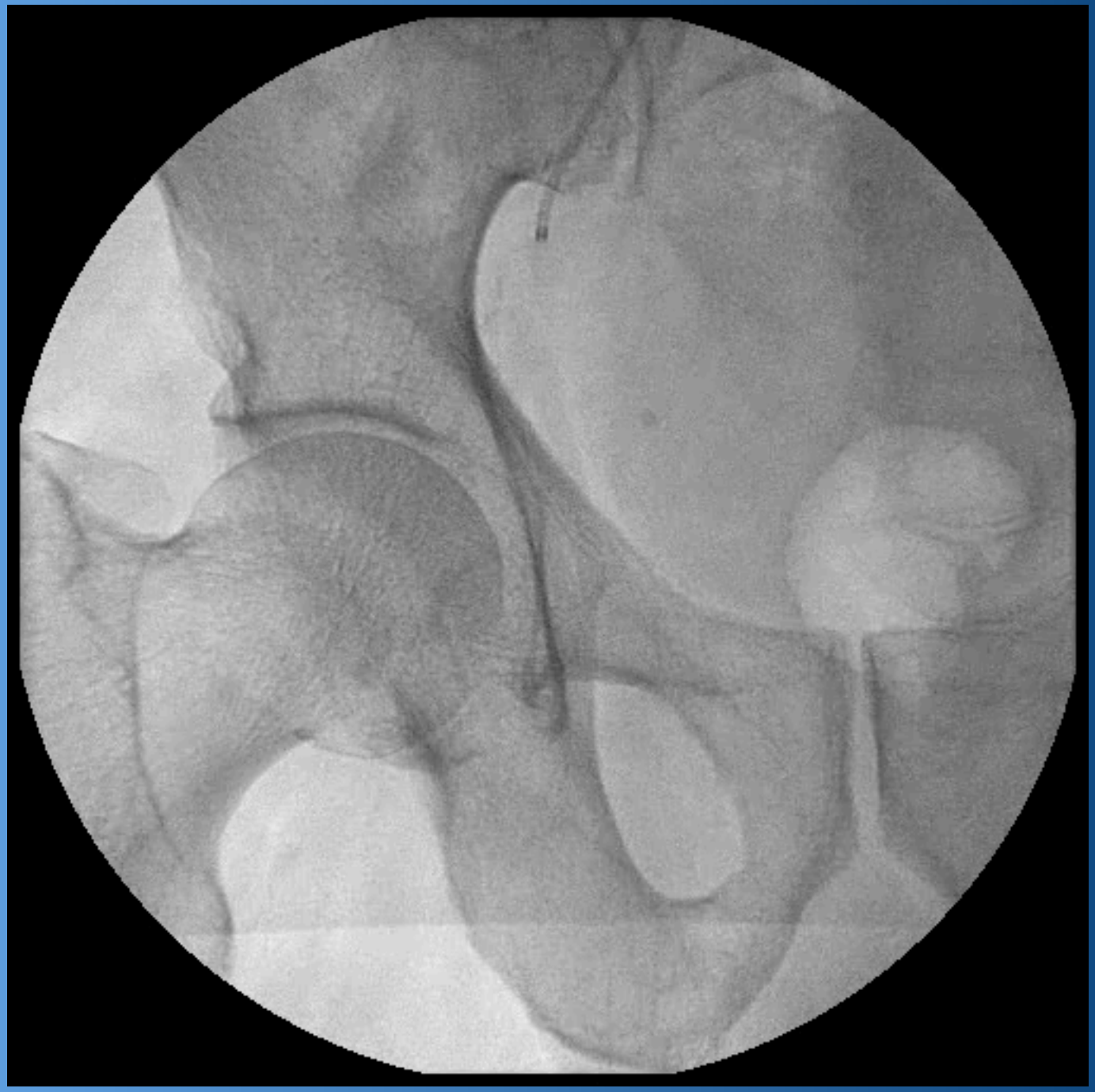
- Approach Contralateral as no space for ipsilateral antegrade approach
- Diffuse disease in contralateral iliac



Acute iliac bifurc angle

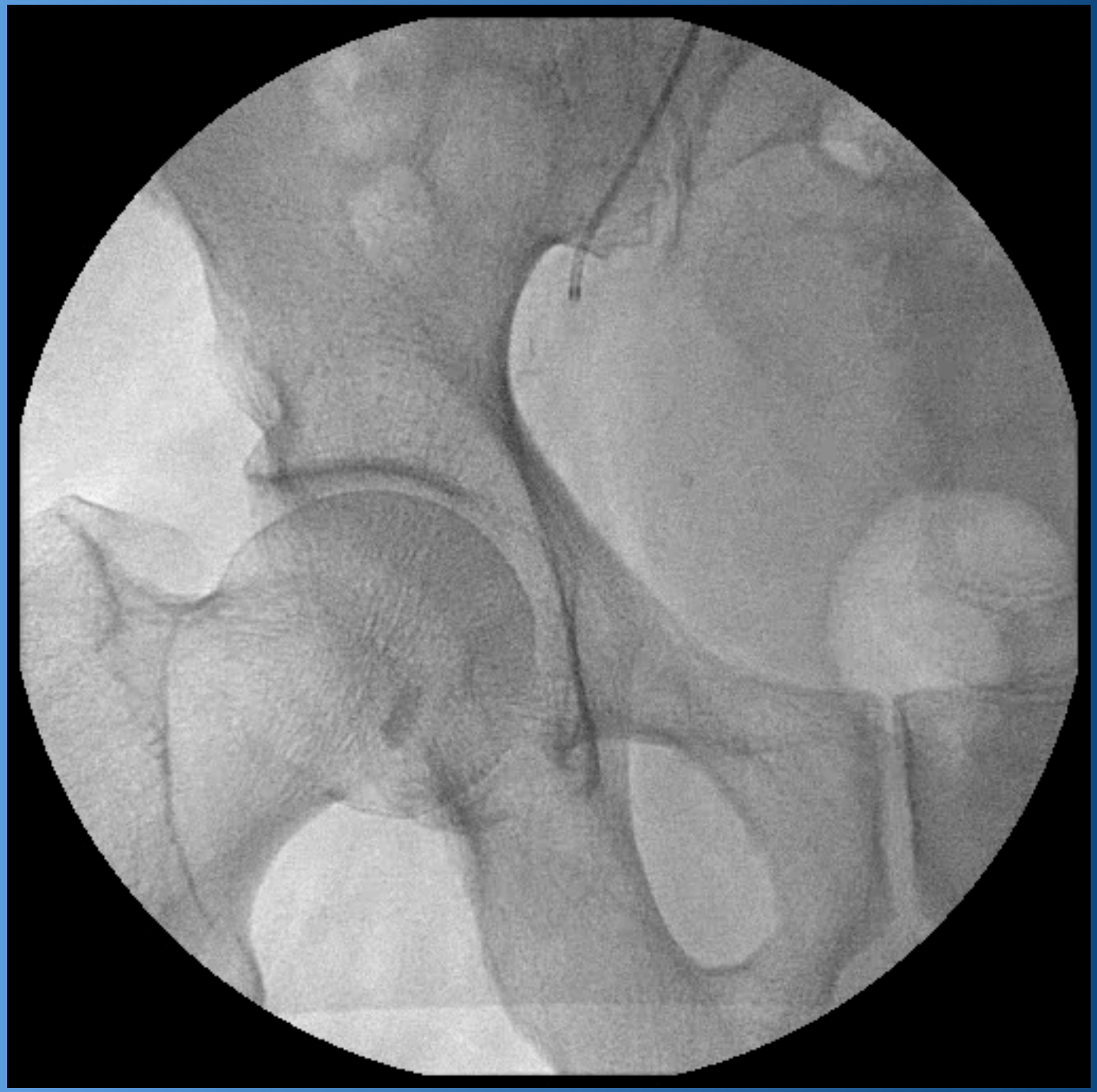
- Balkins won’t track
- Took 7F Renal guide

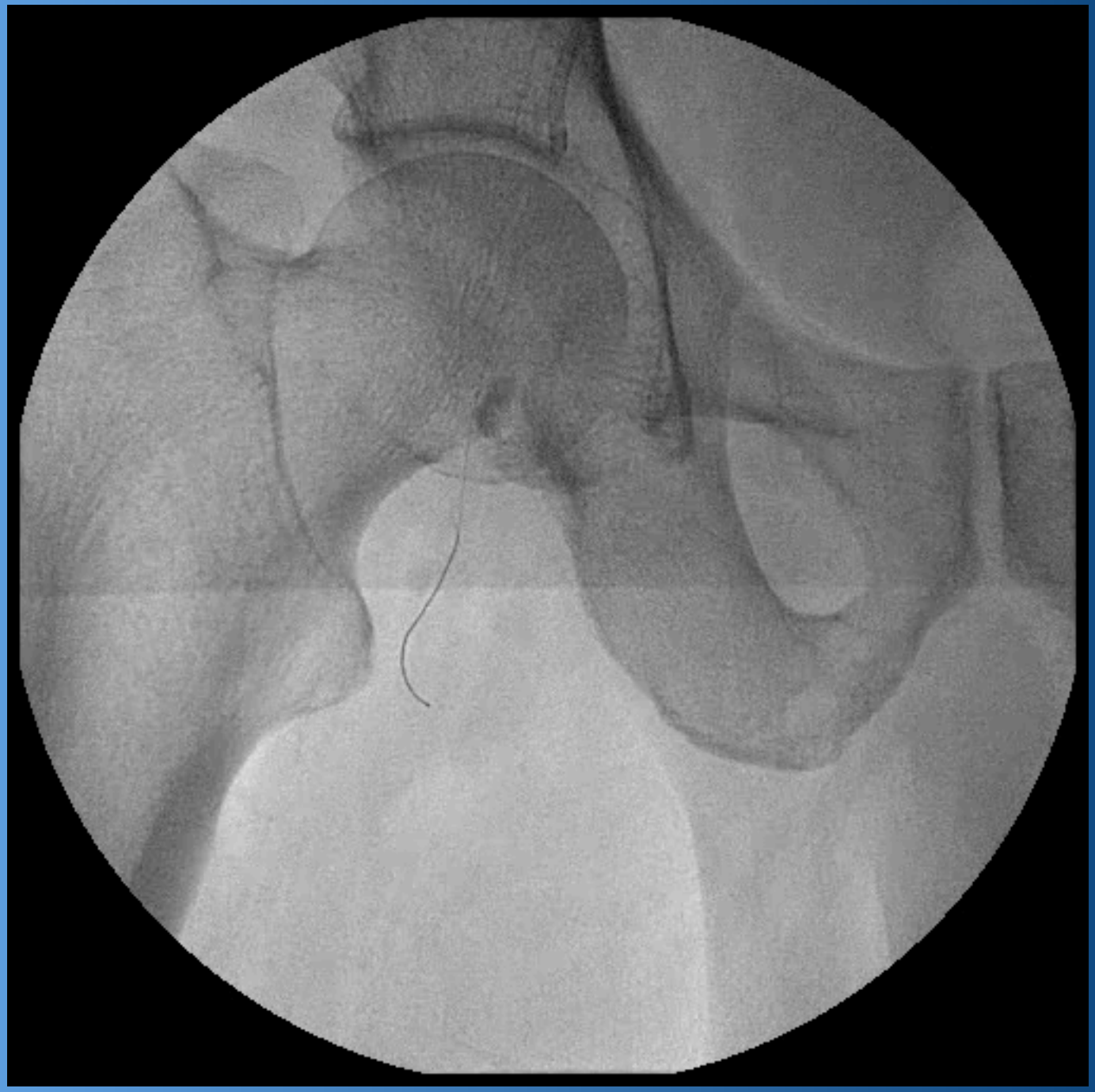


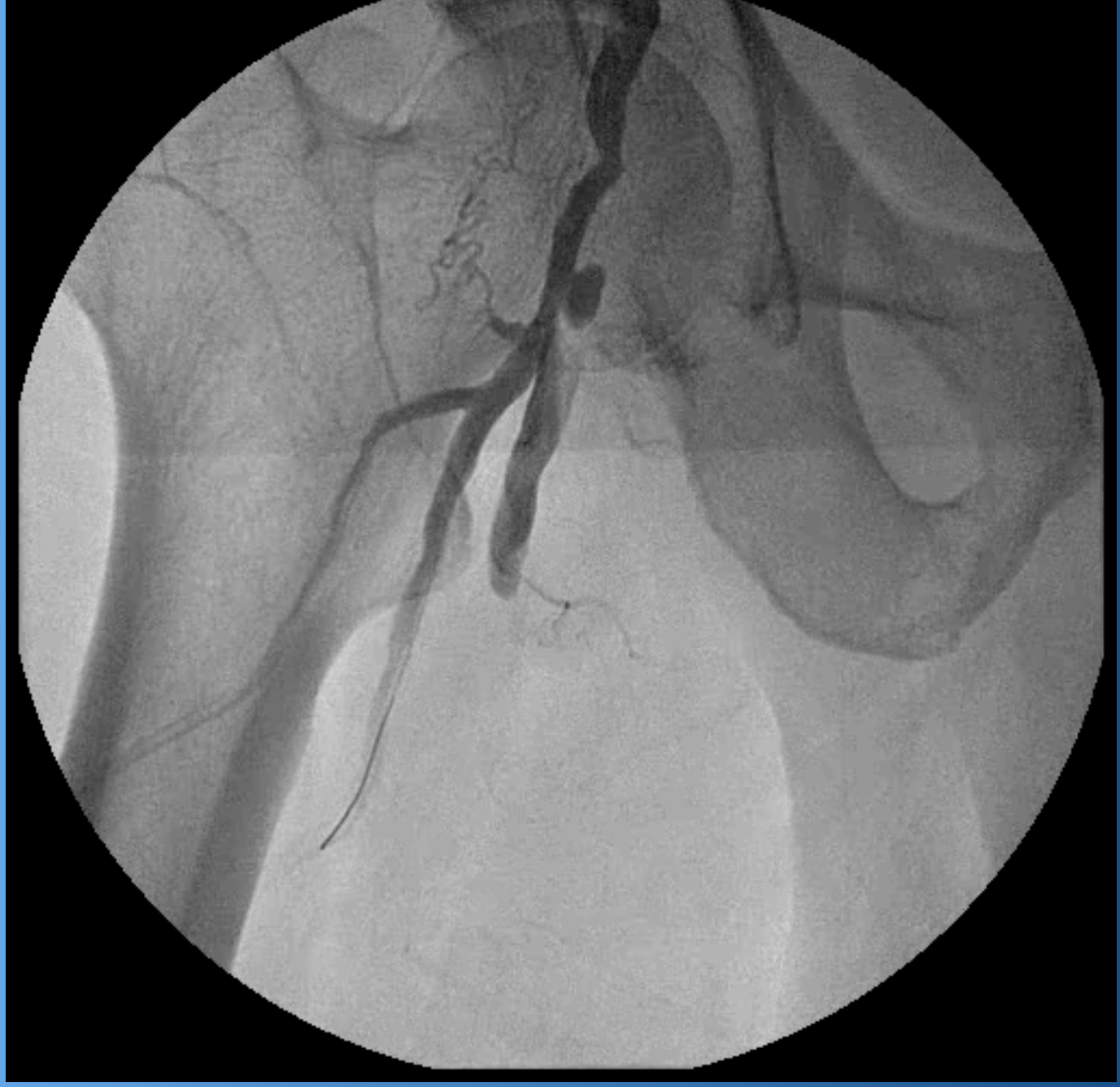


Another problem

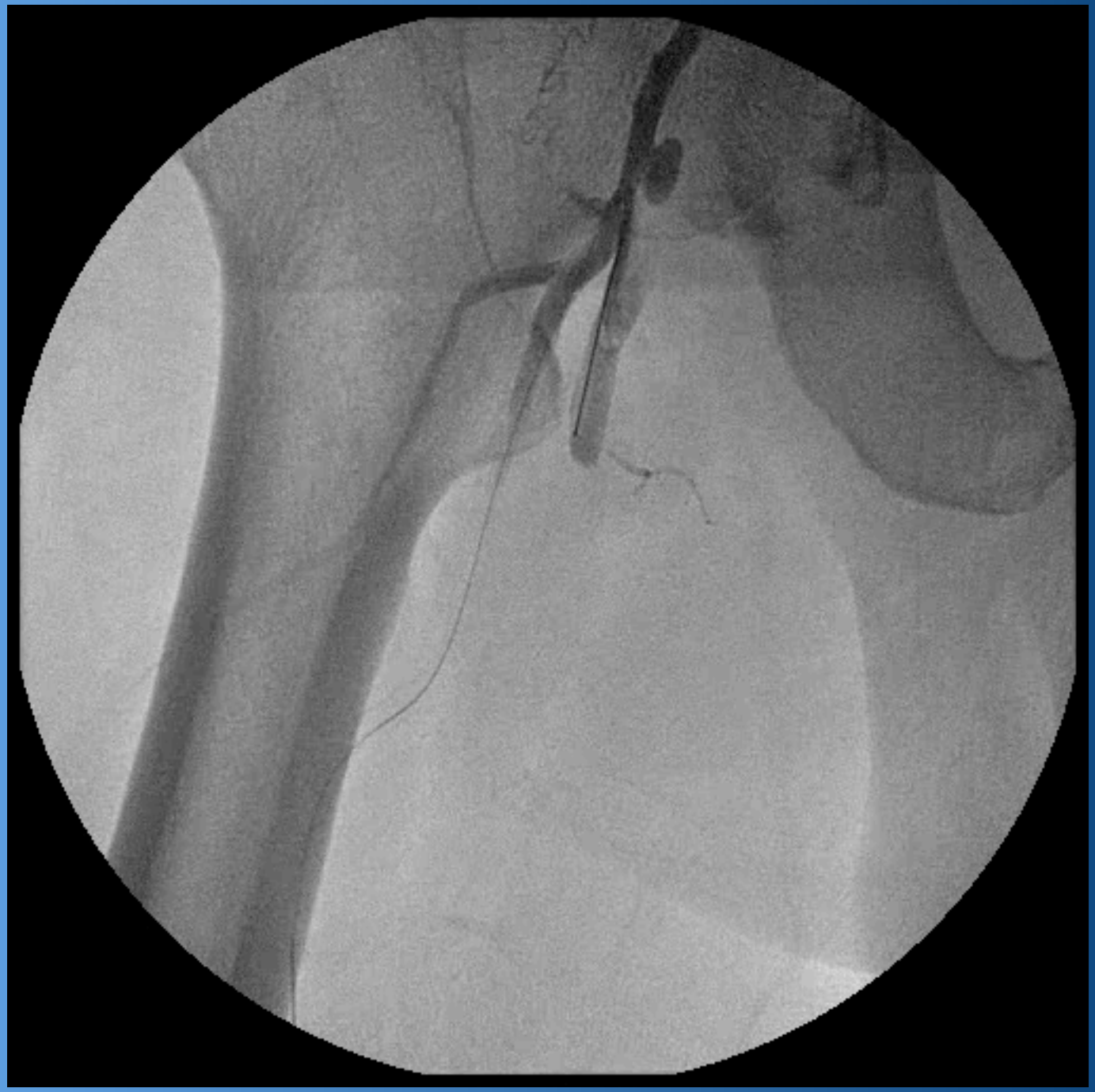
- Profunda is almost total
- Needs protection
- wired with 0.014 whisper wire

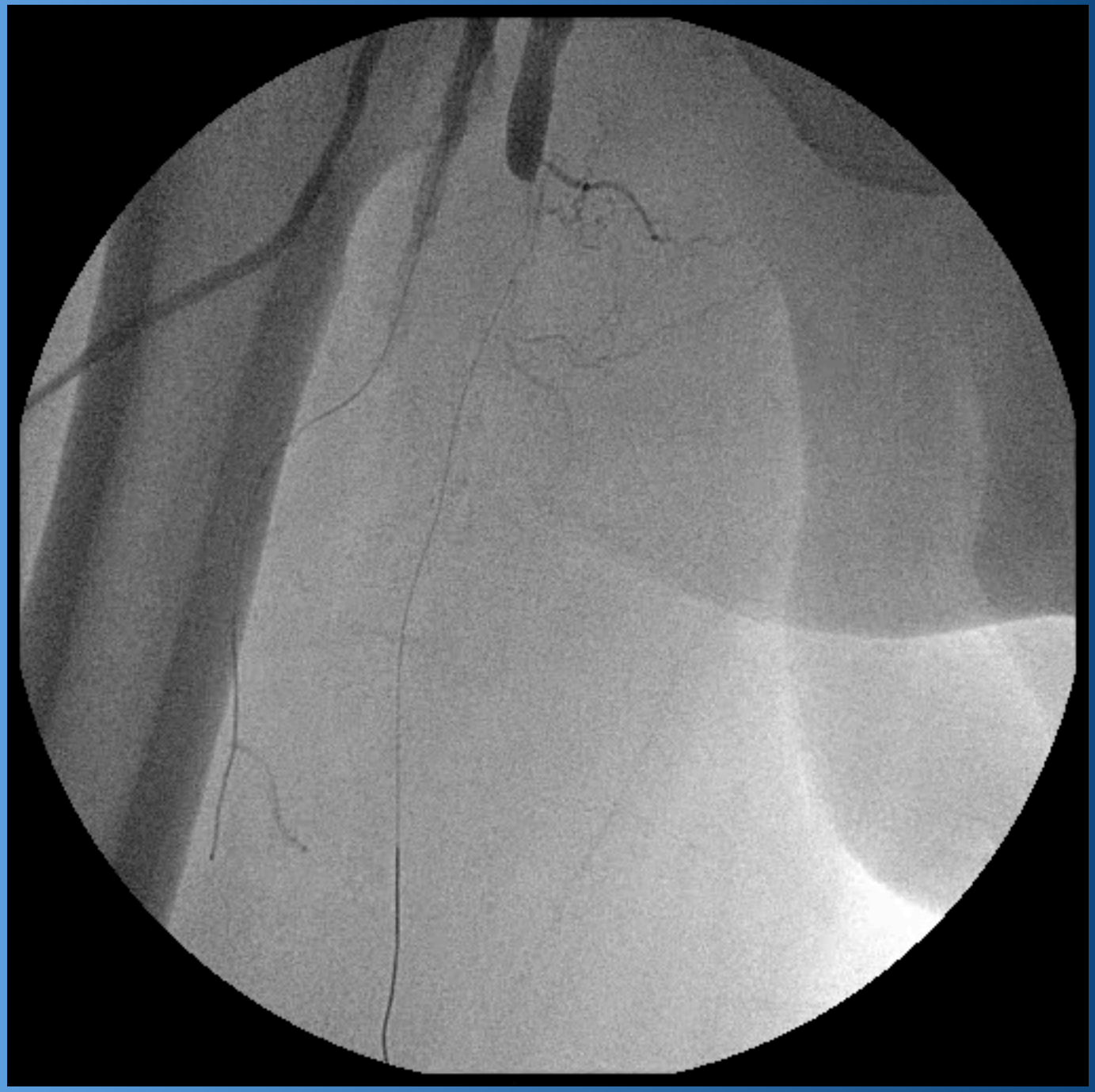


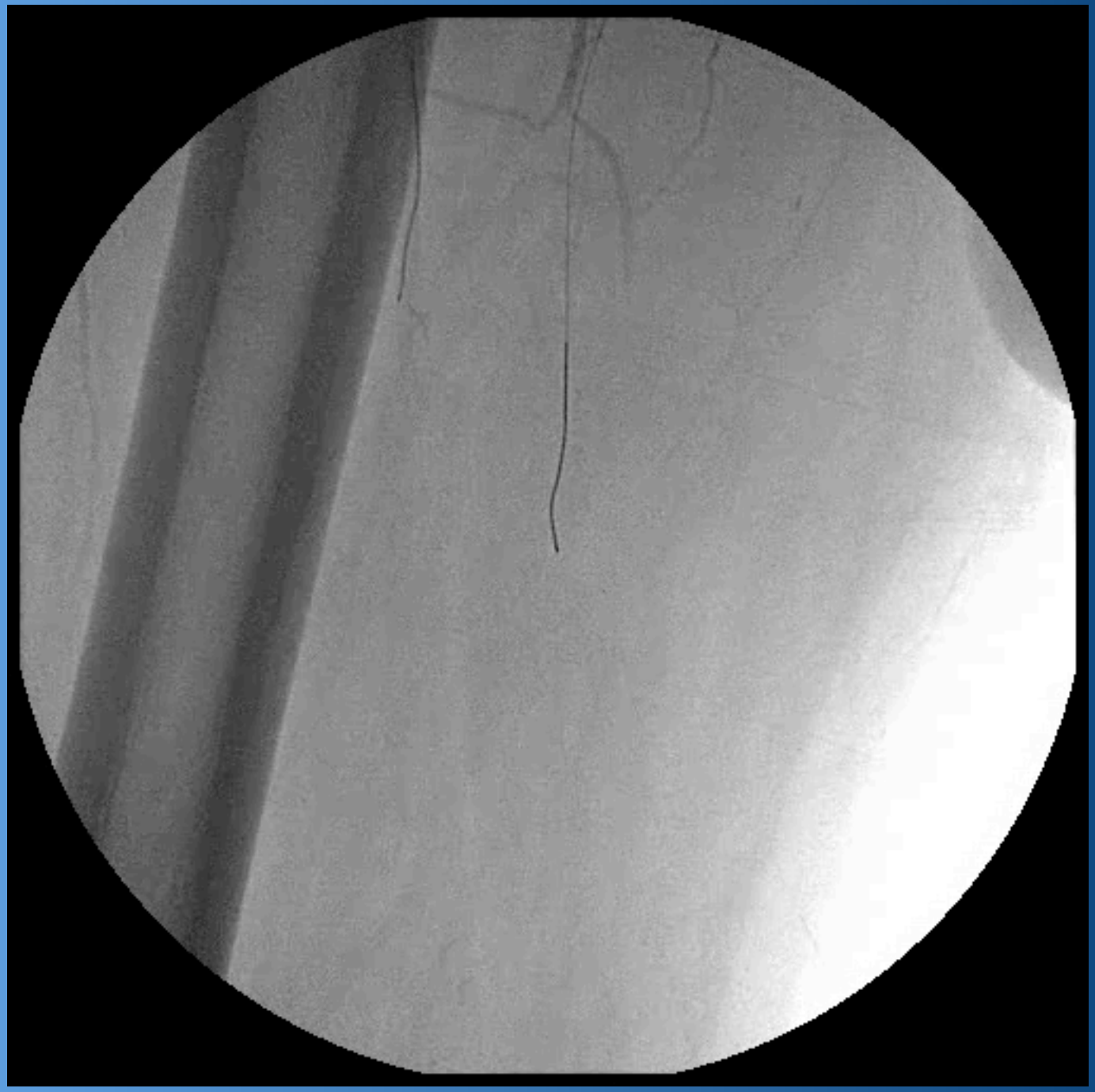


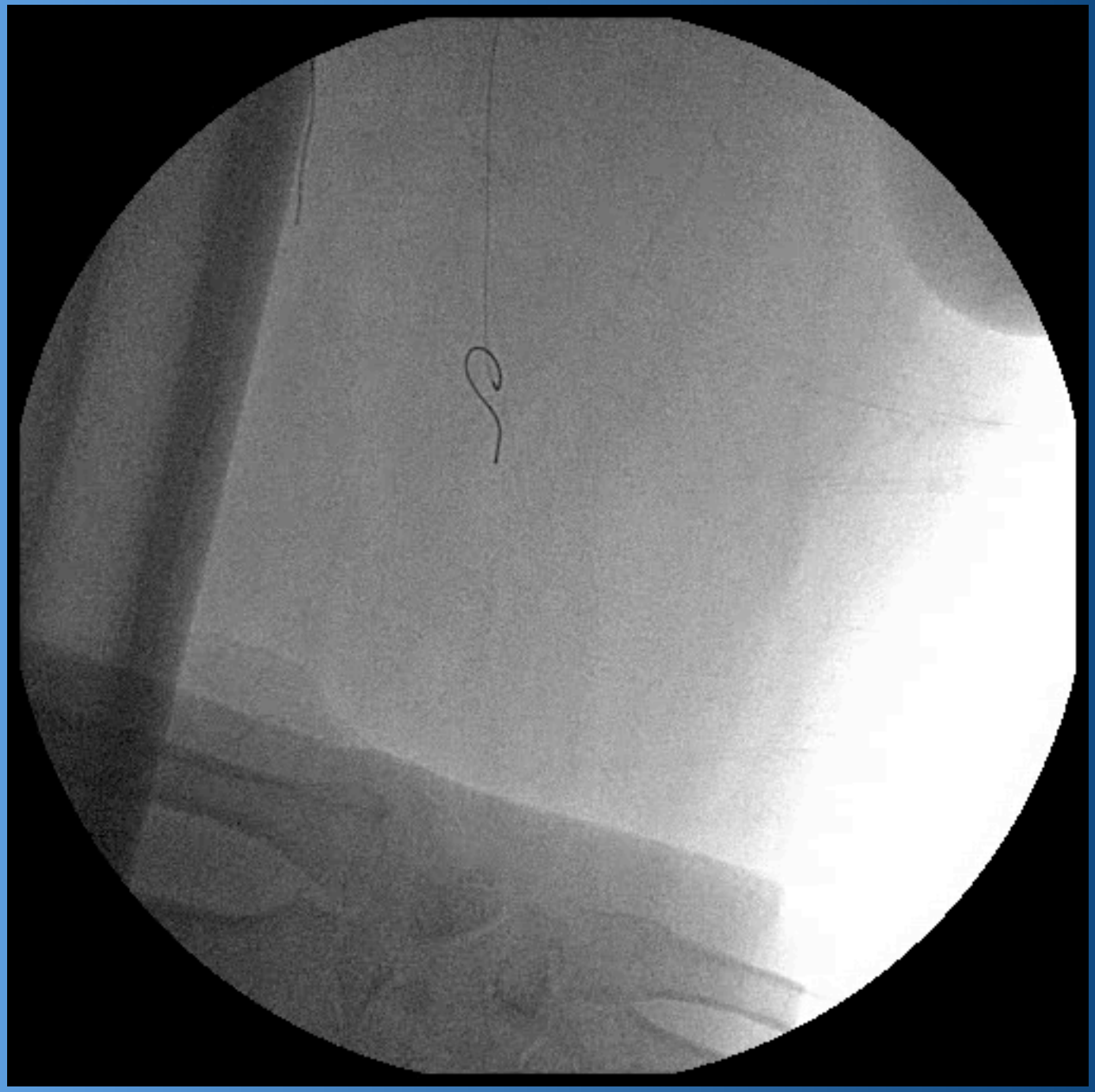


- 0.014 Cross it XT wire

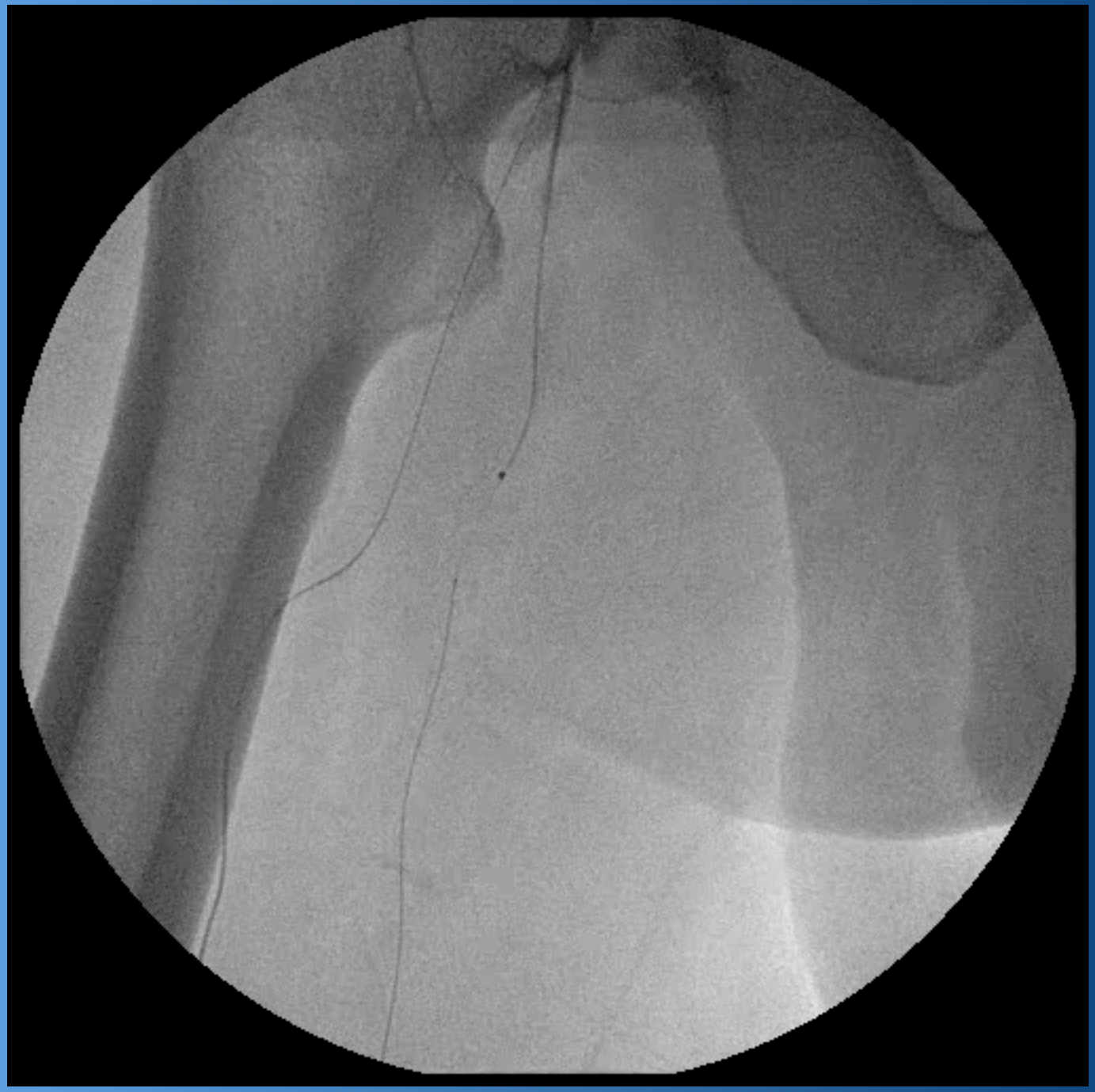


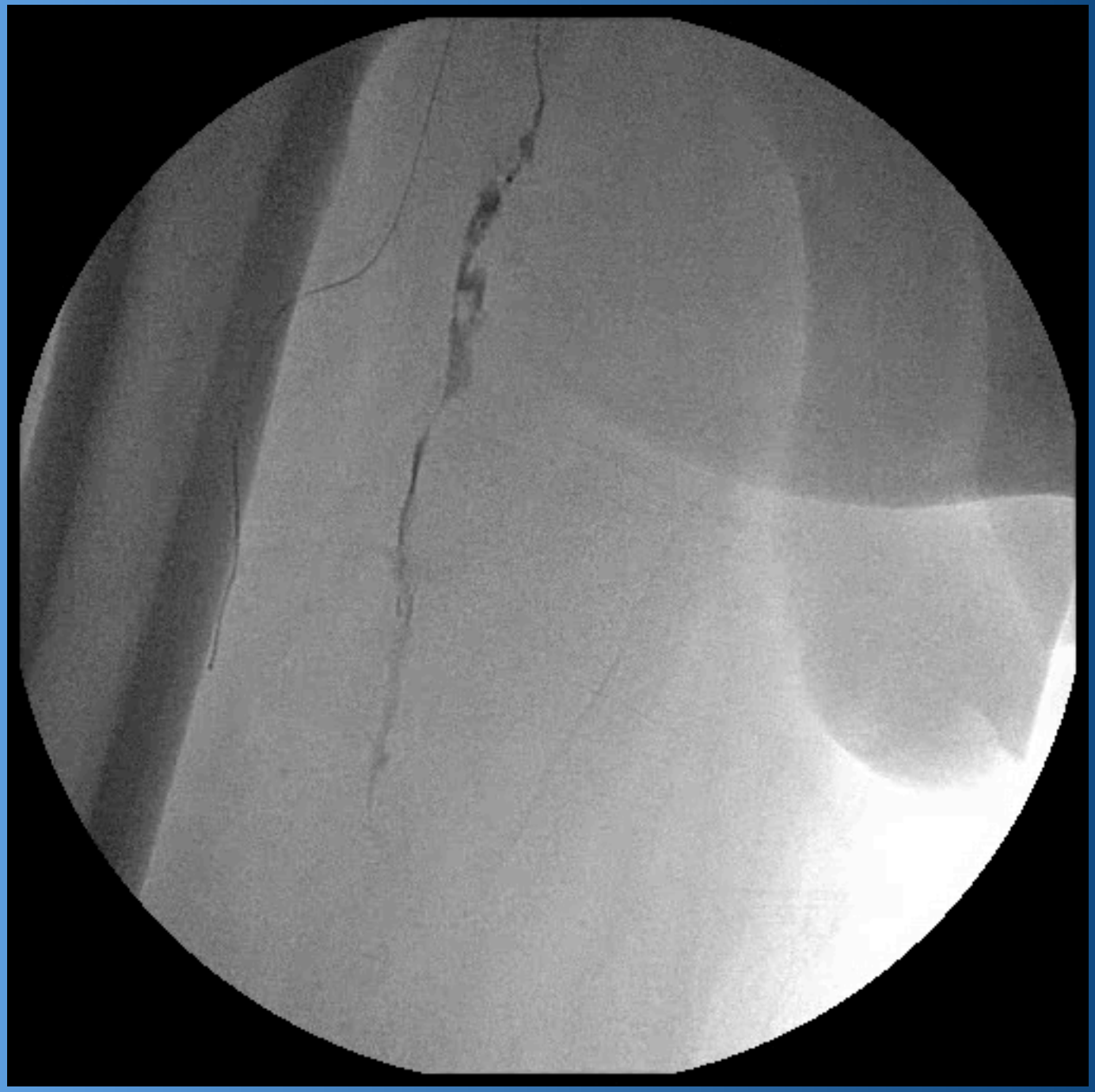


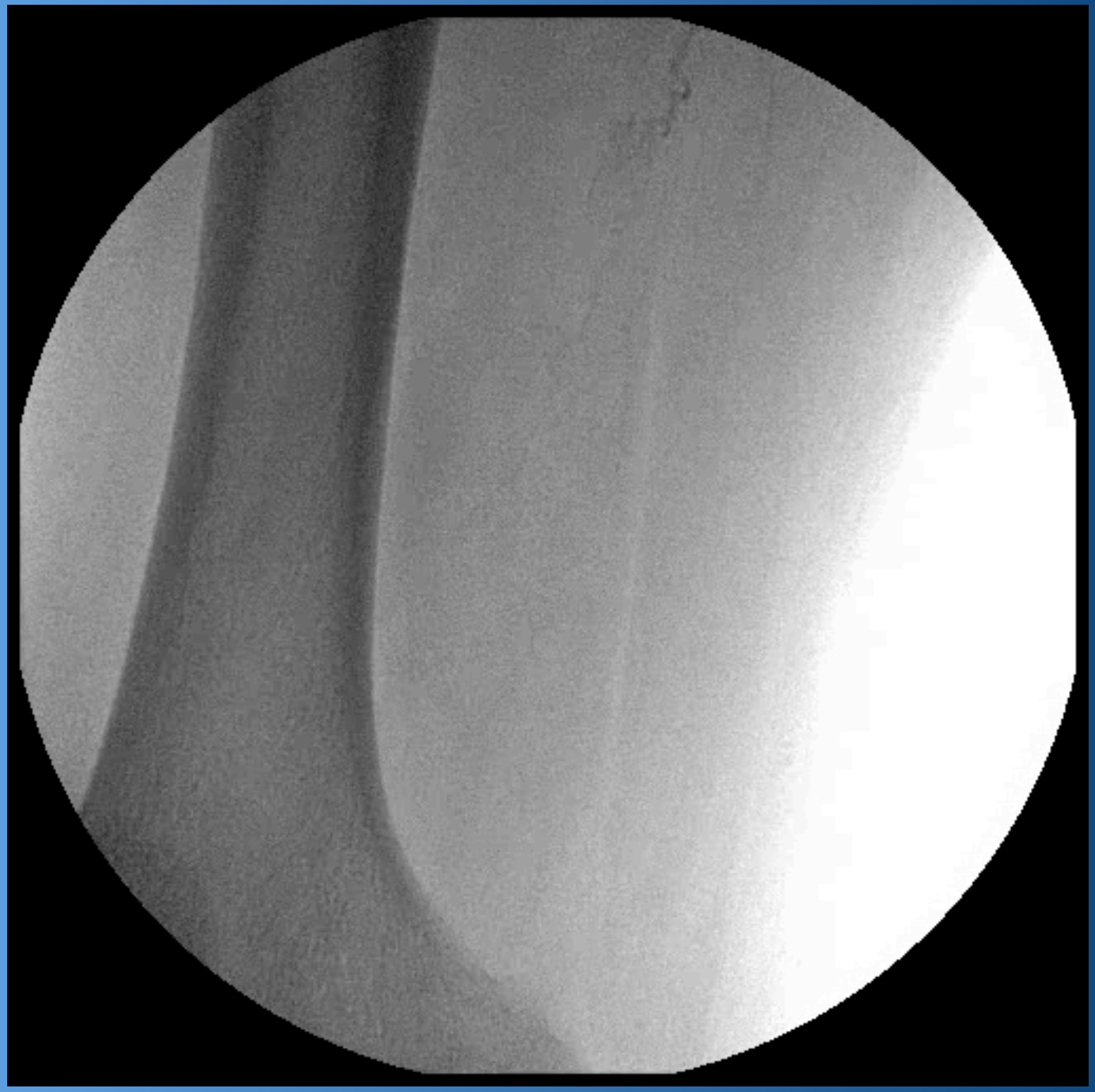


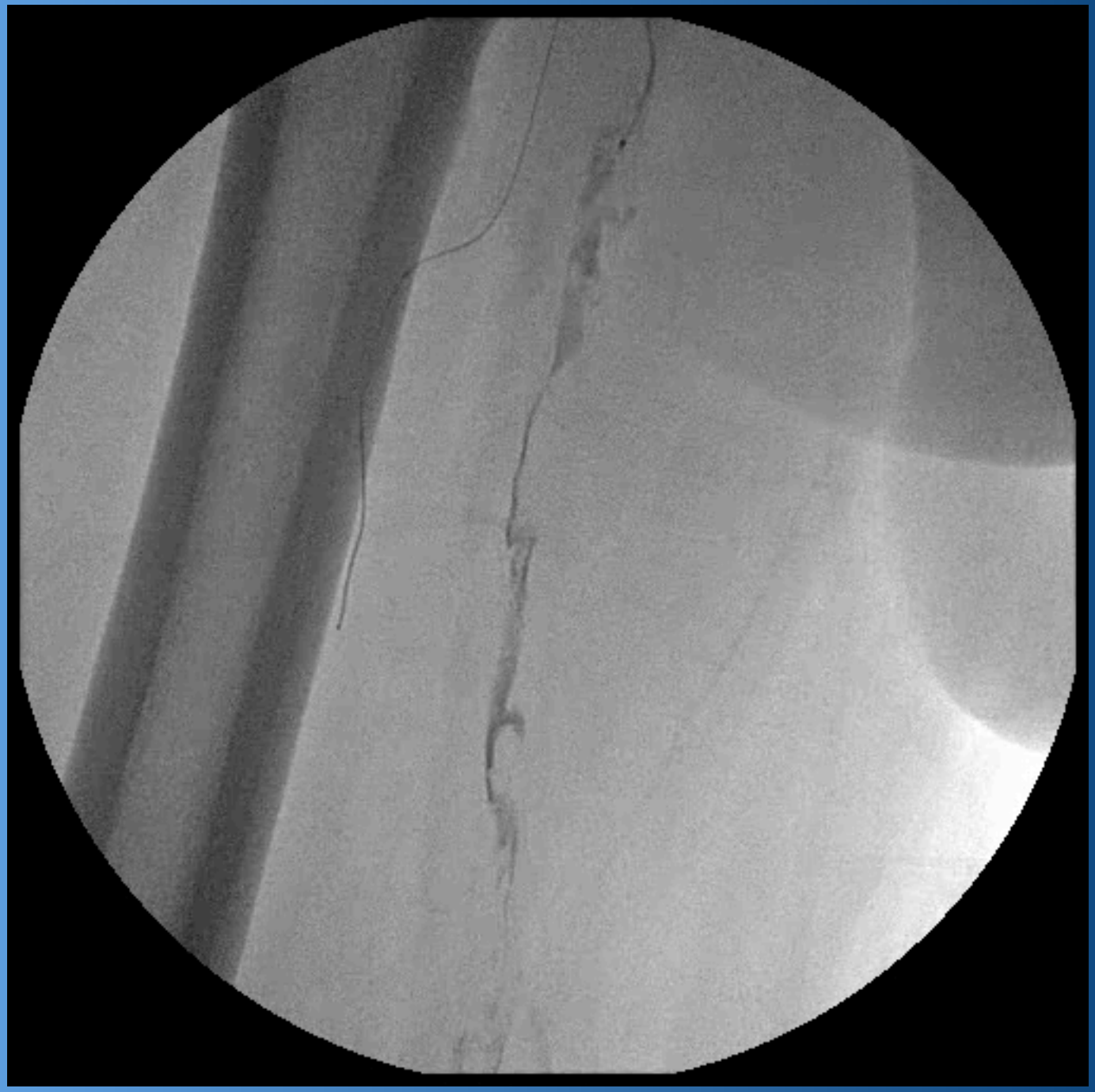


- Micro catheter advanced

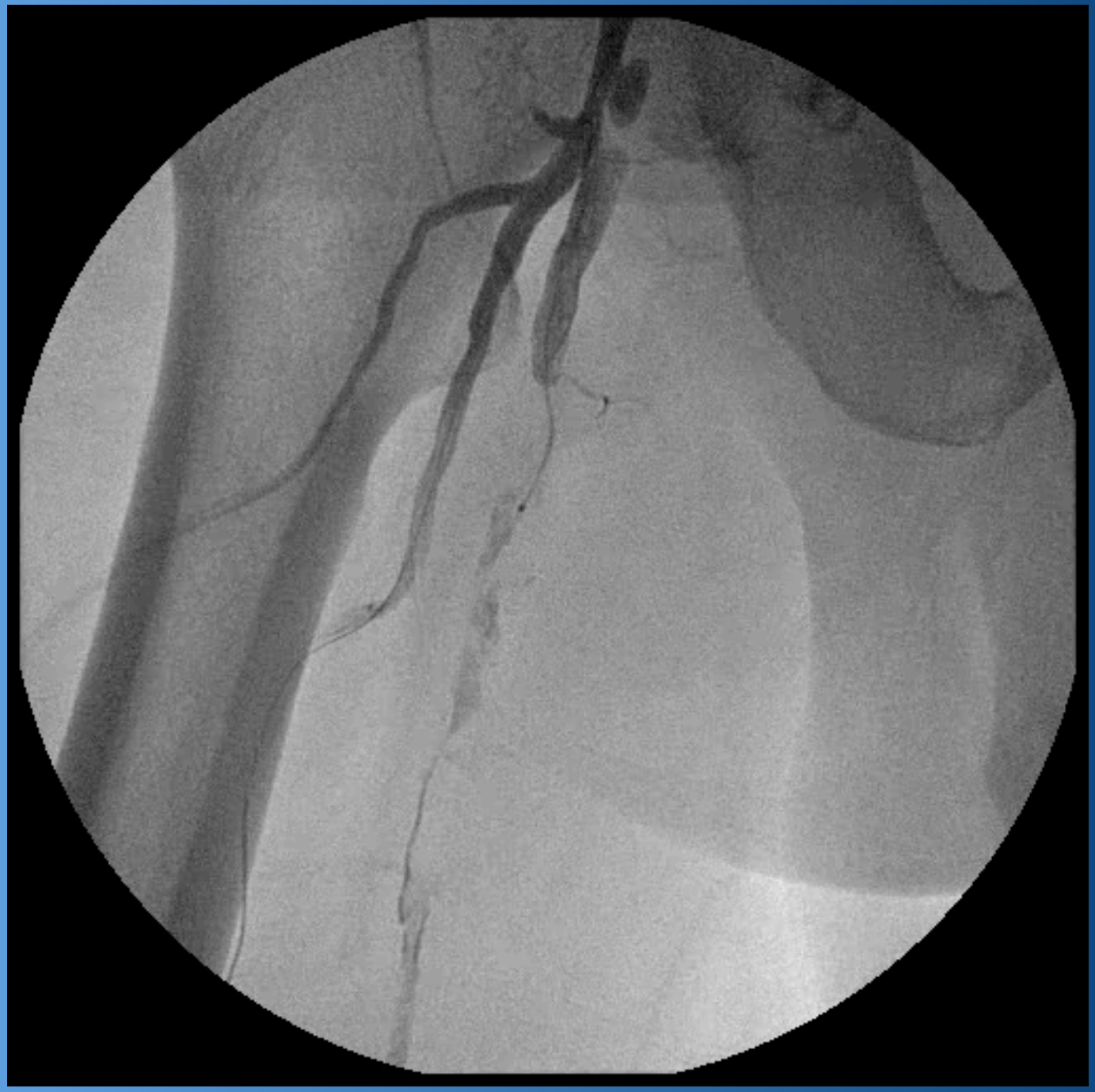






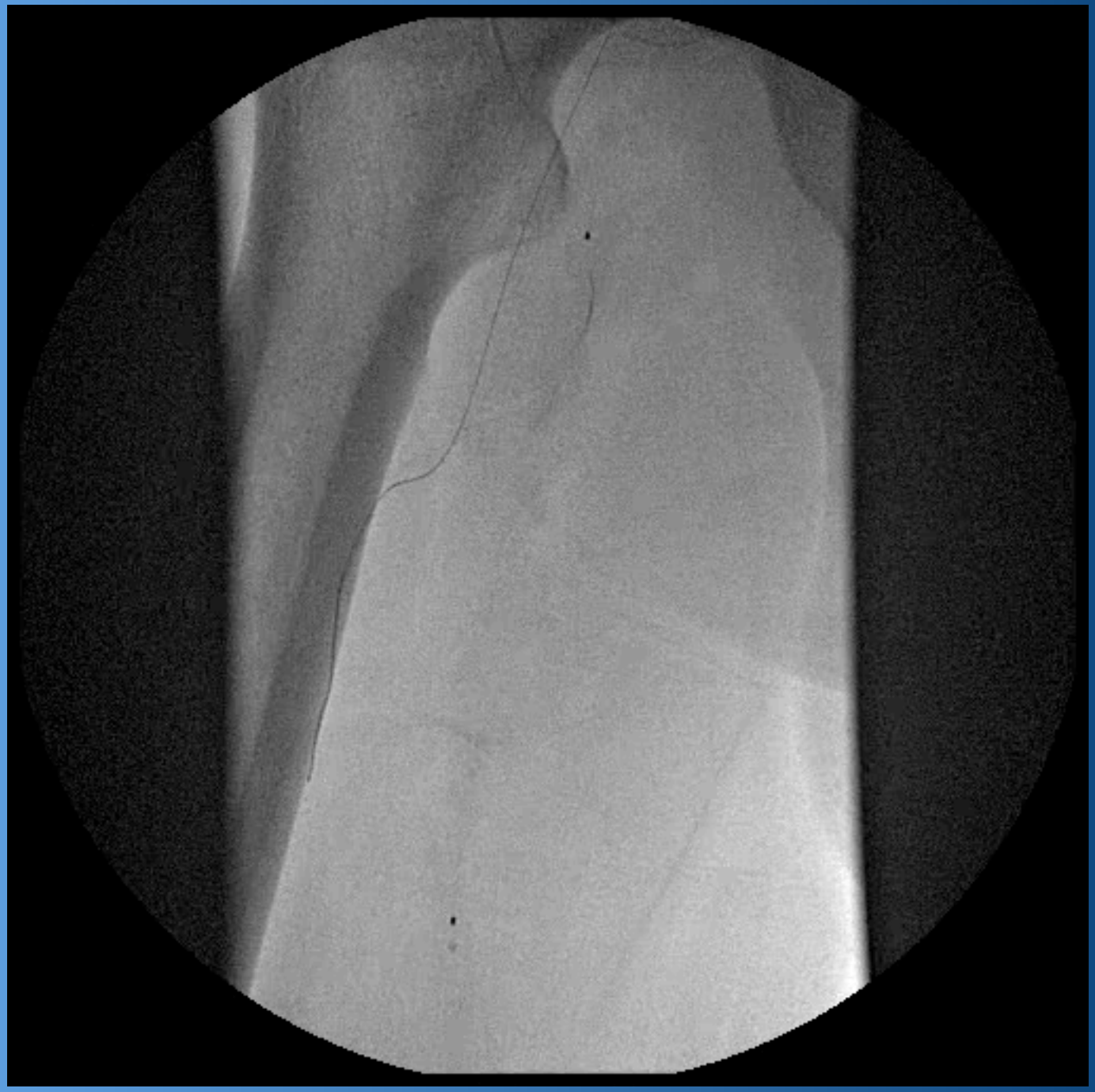


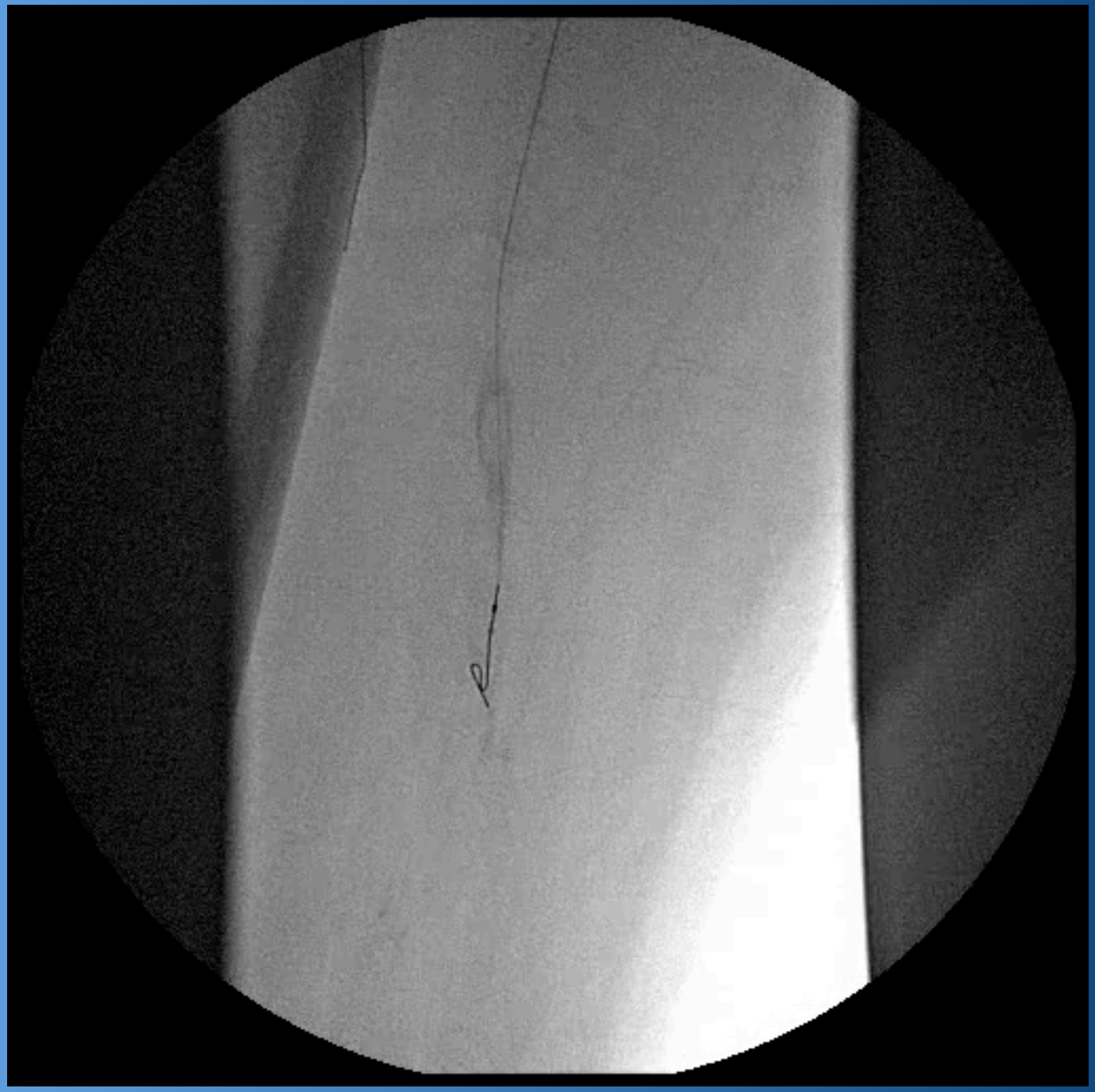
- Microcatheter not tracking beyond this point

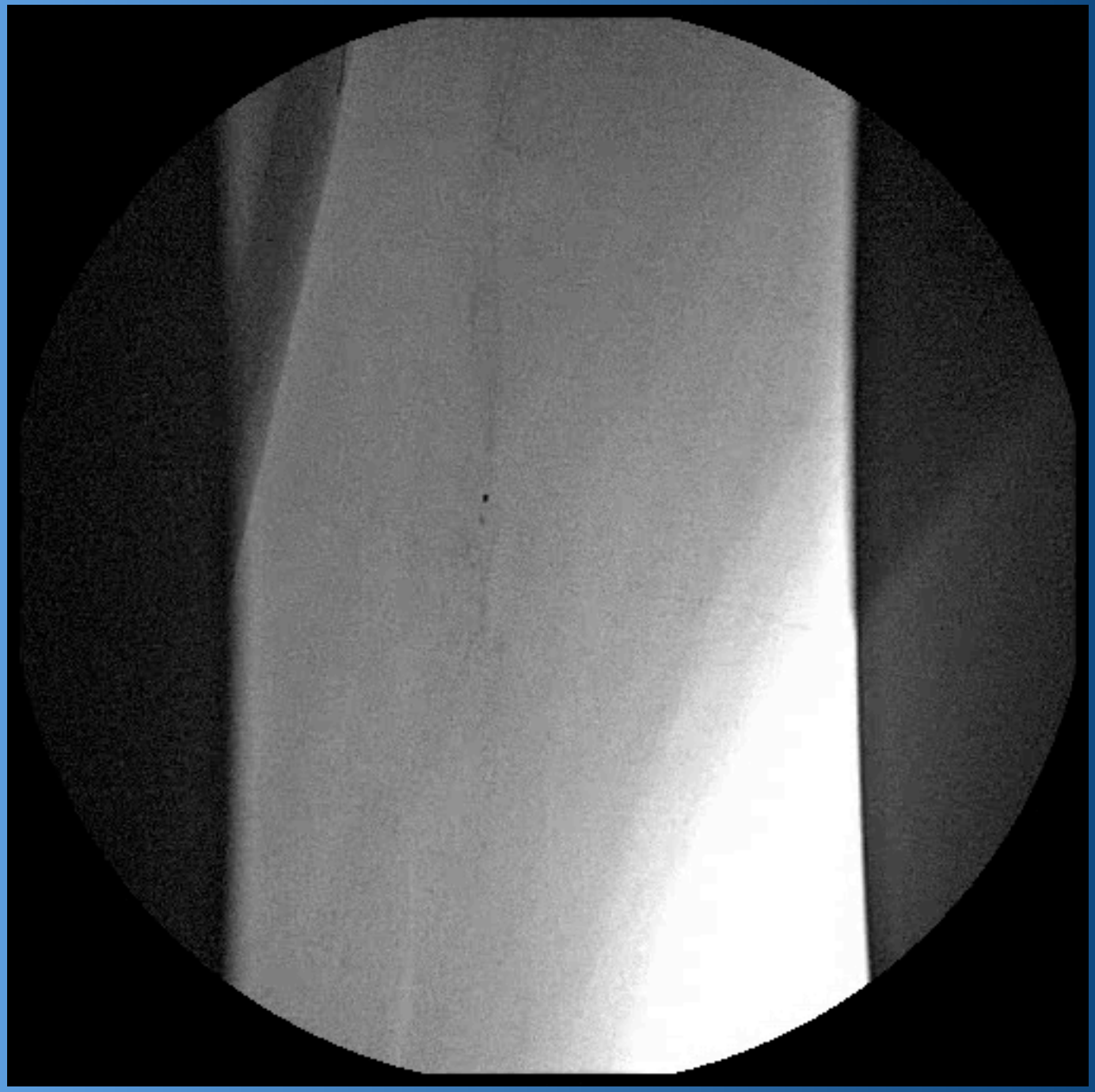


Microcath exchanged for OTW balloon

- Advance micro 14 Cook OTW balloon 3 x 10
- Hydrophilic coating

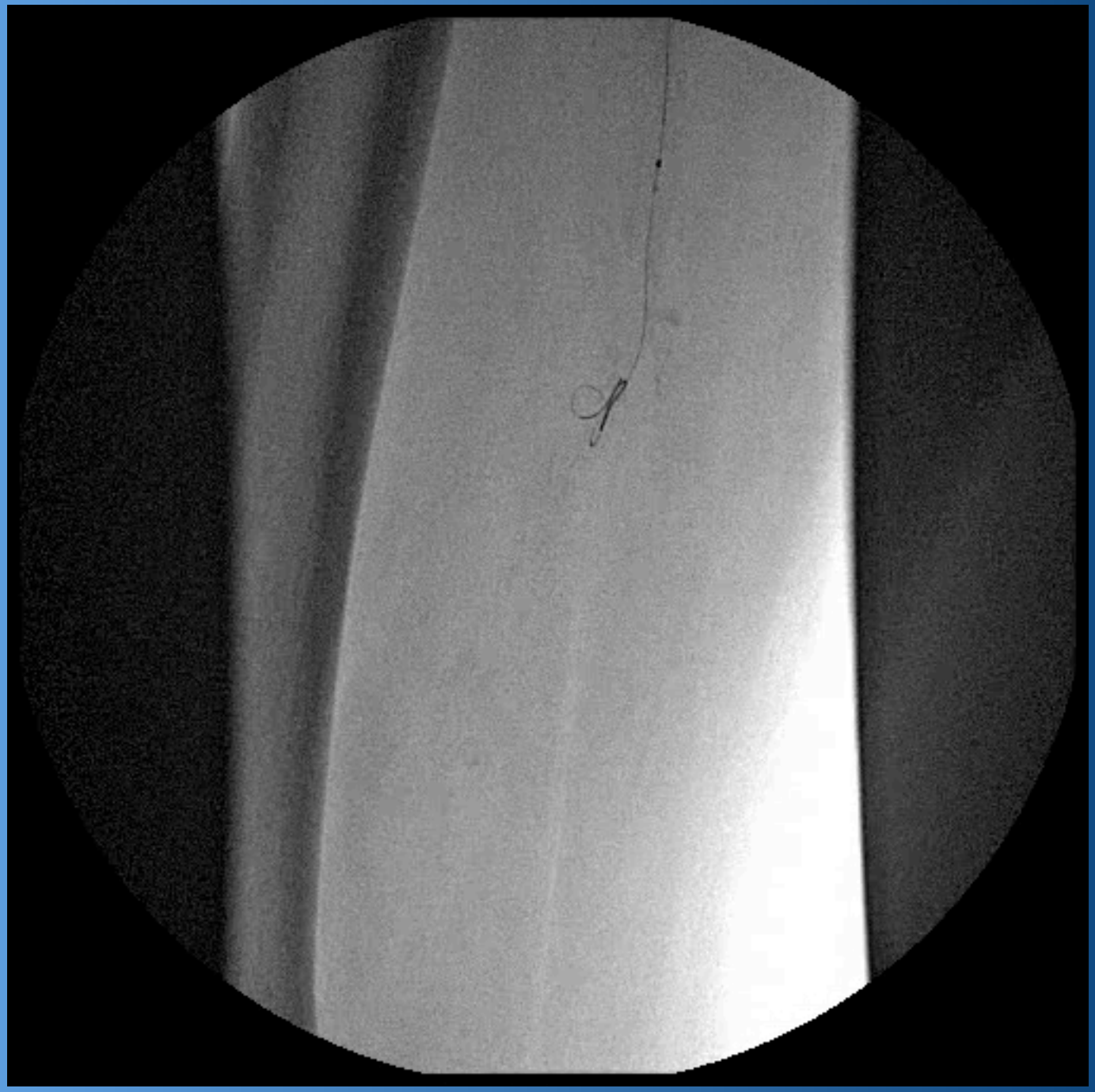


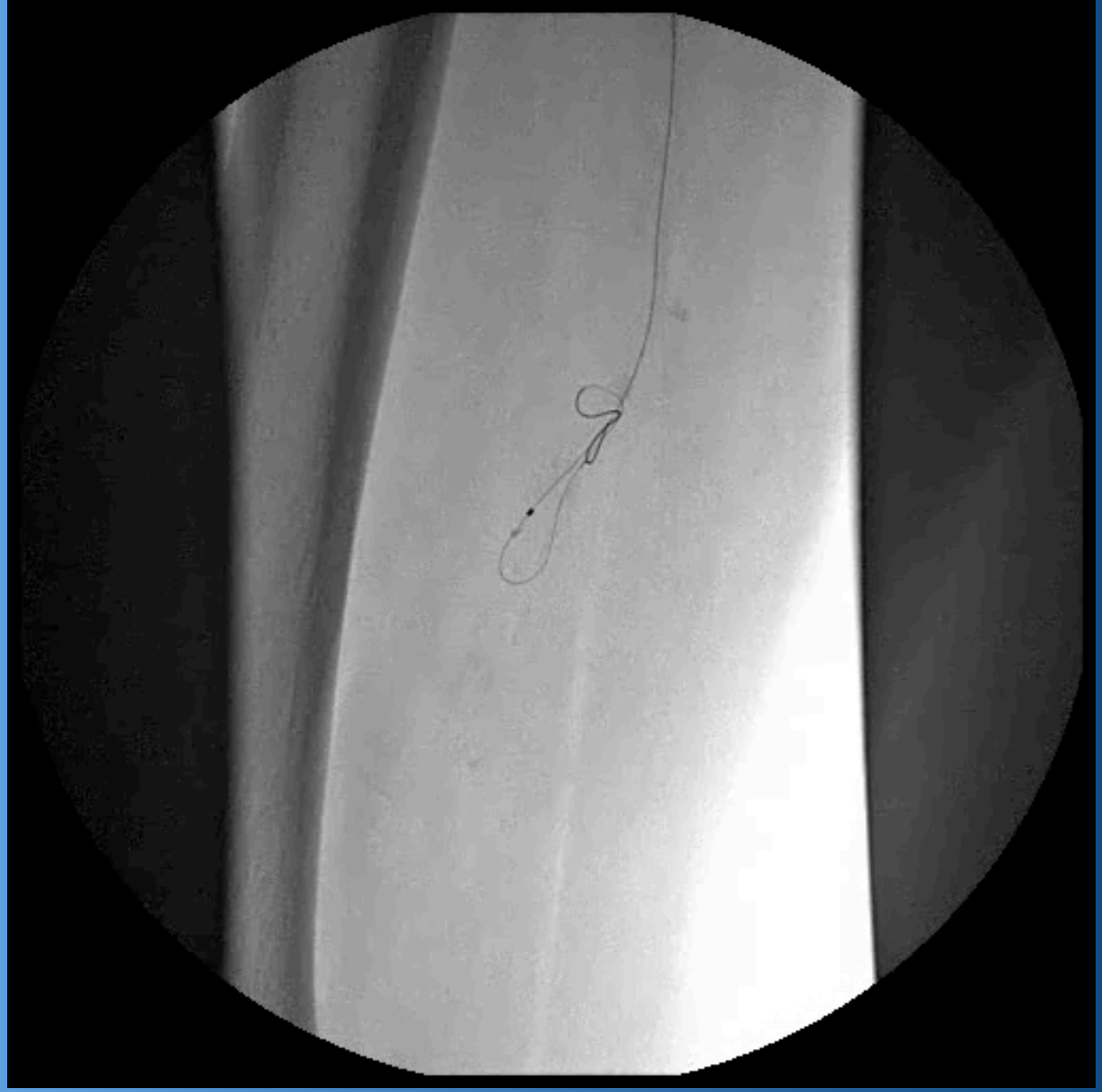


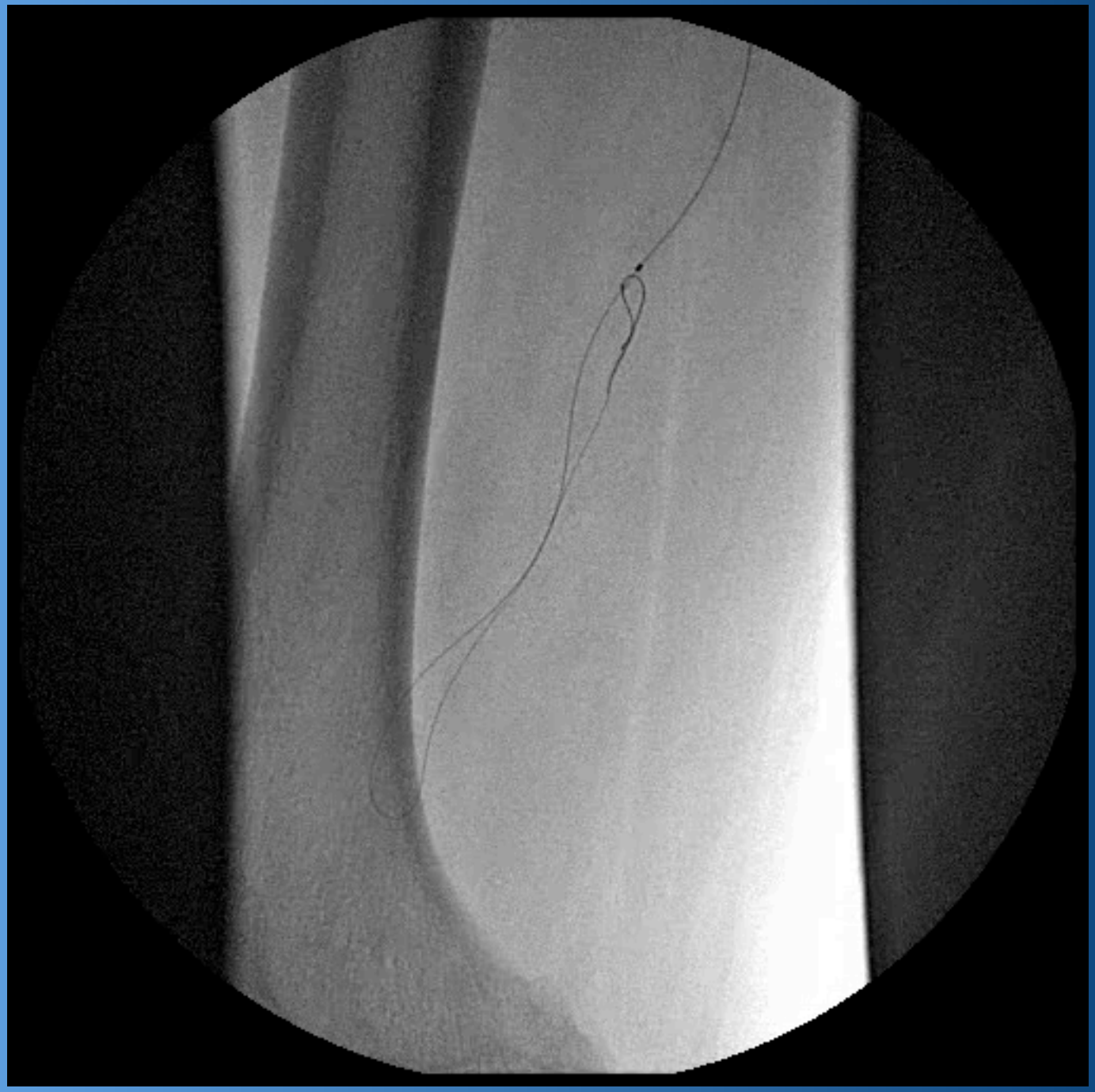


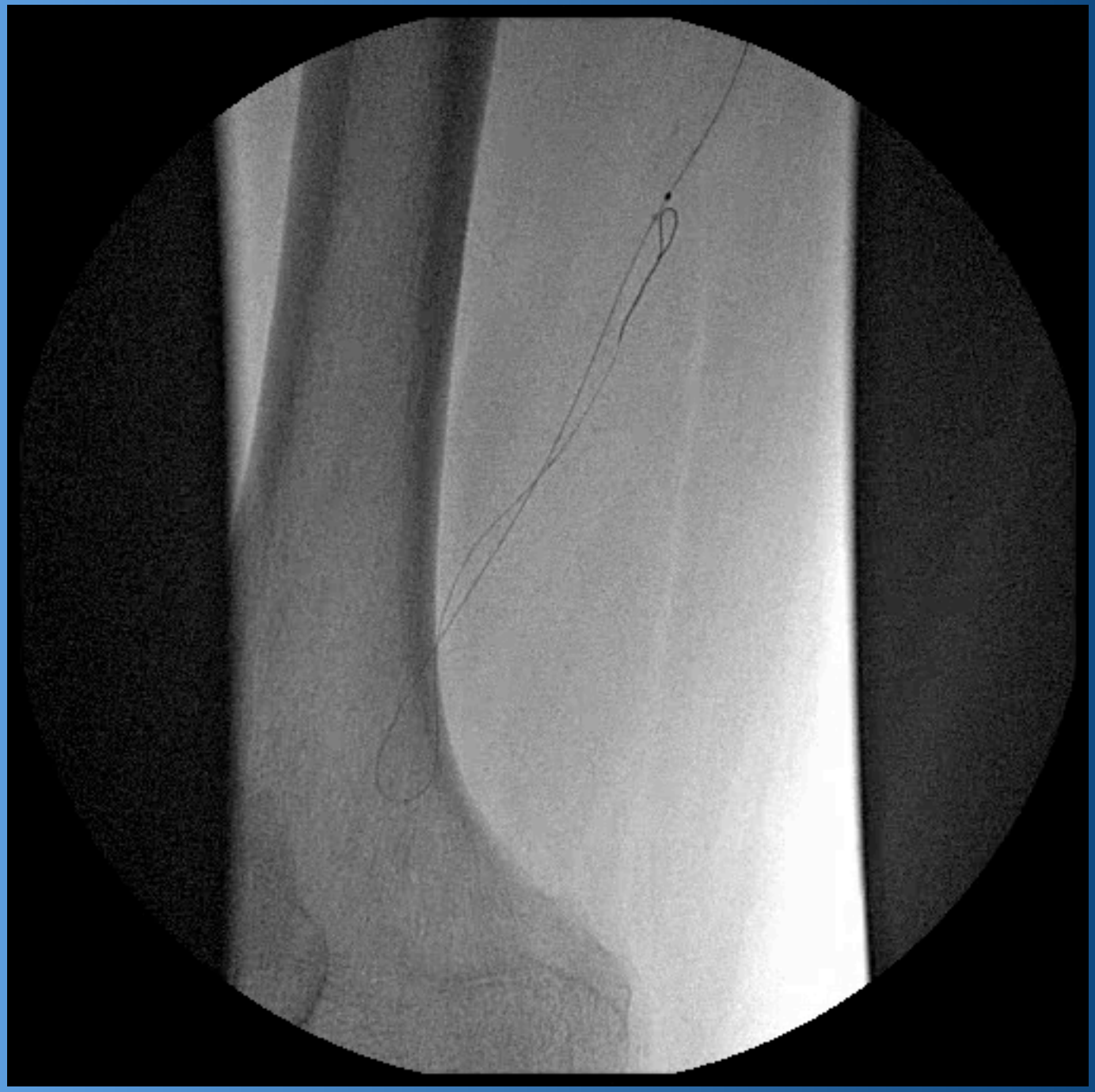
Subintimal tracking planned

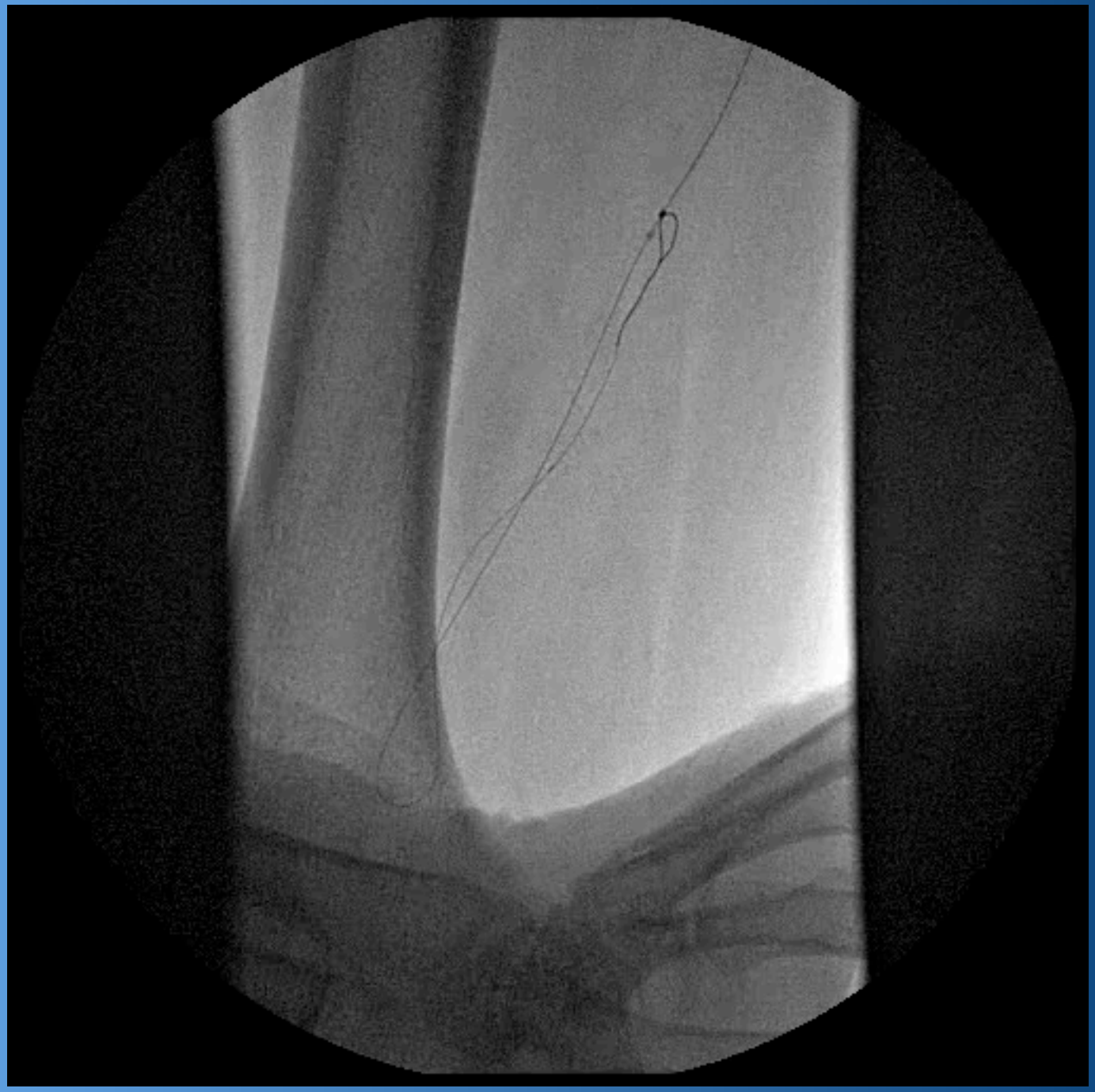
- Knuckle to avoid collateral which is already damaged

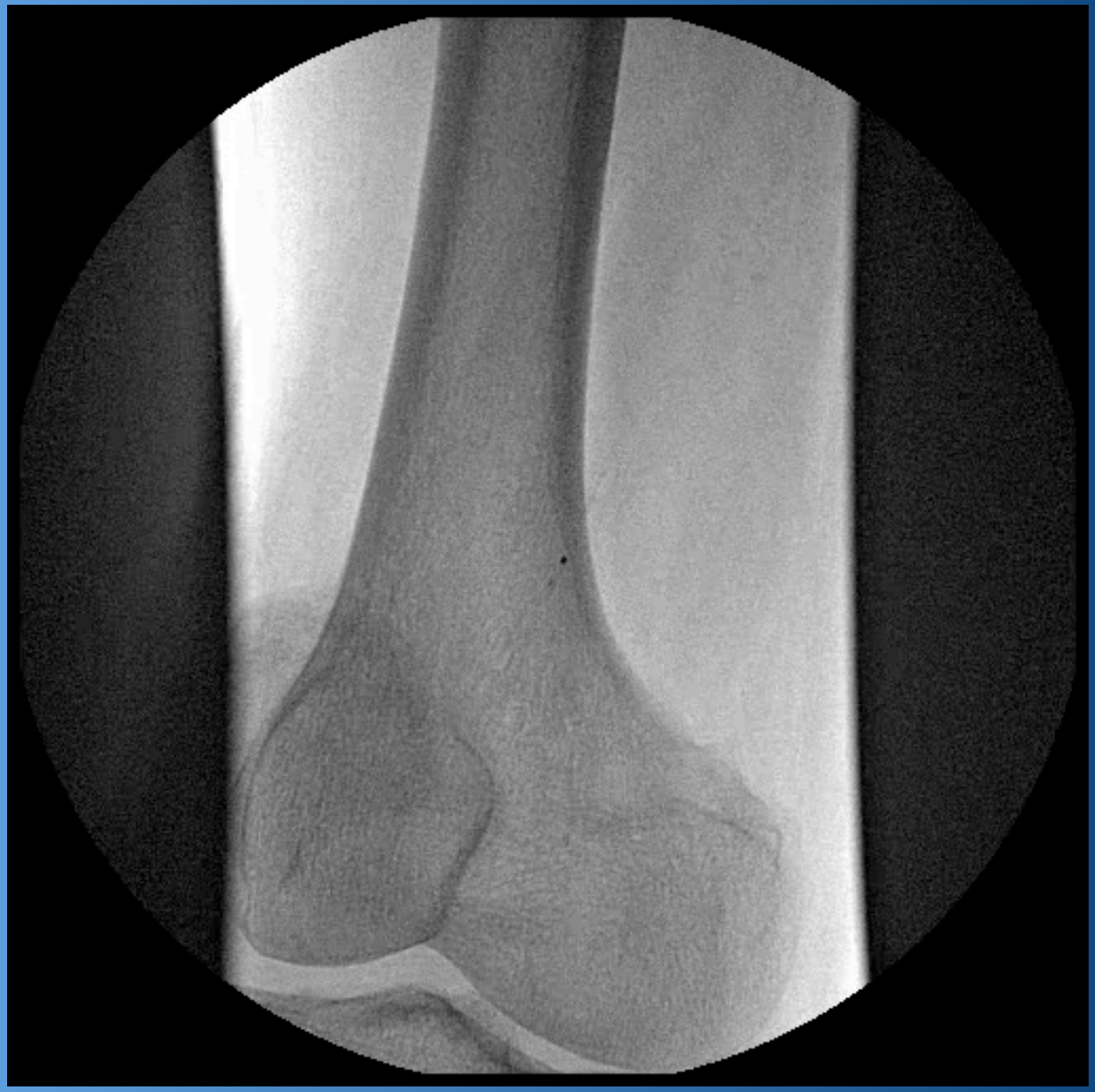


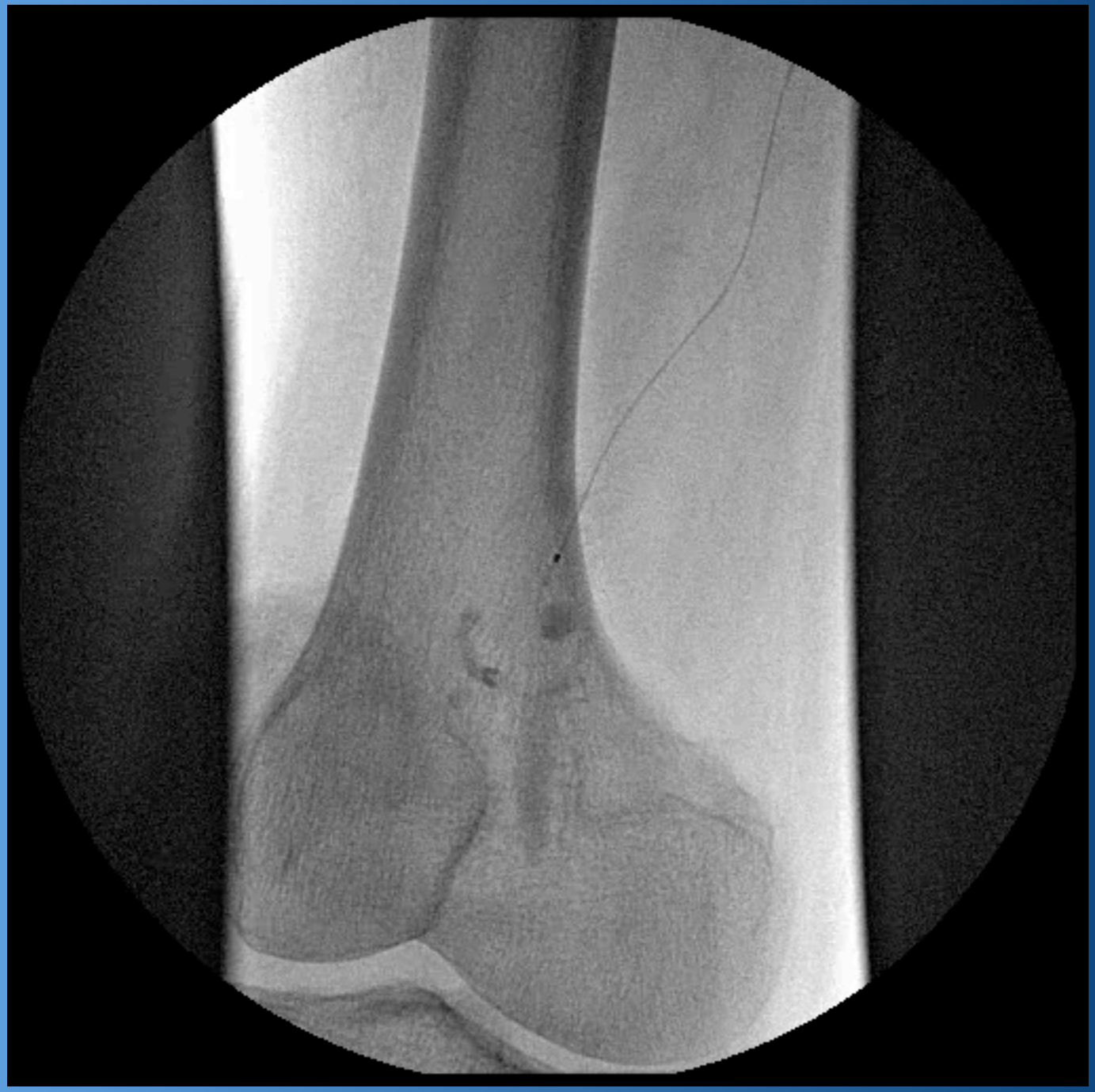


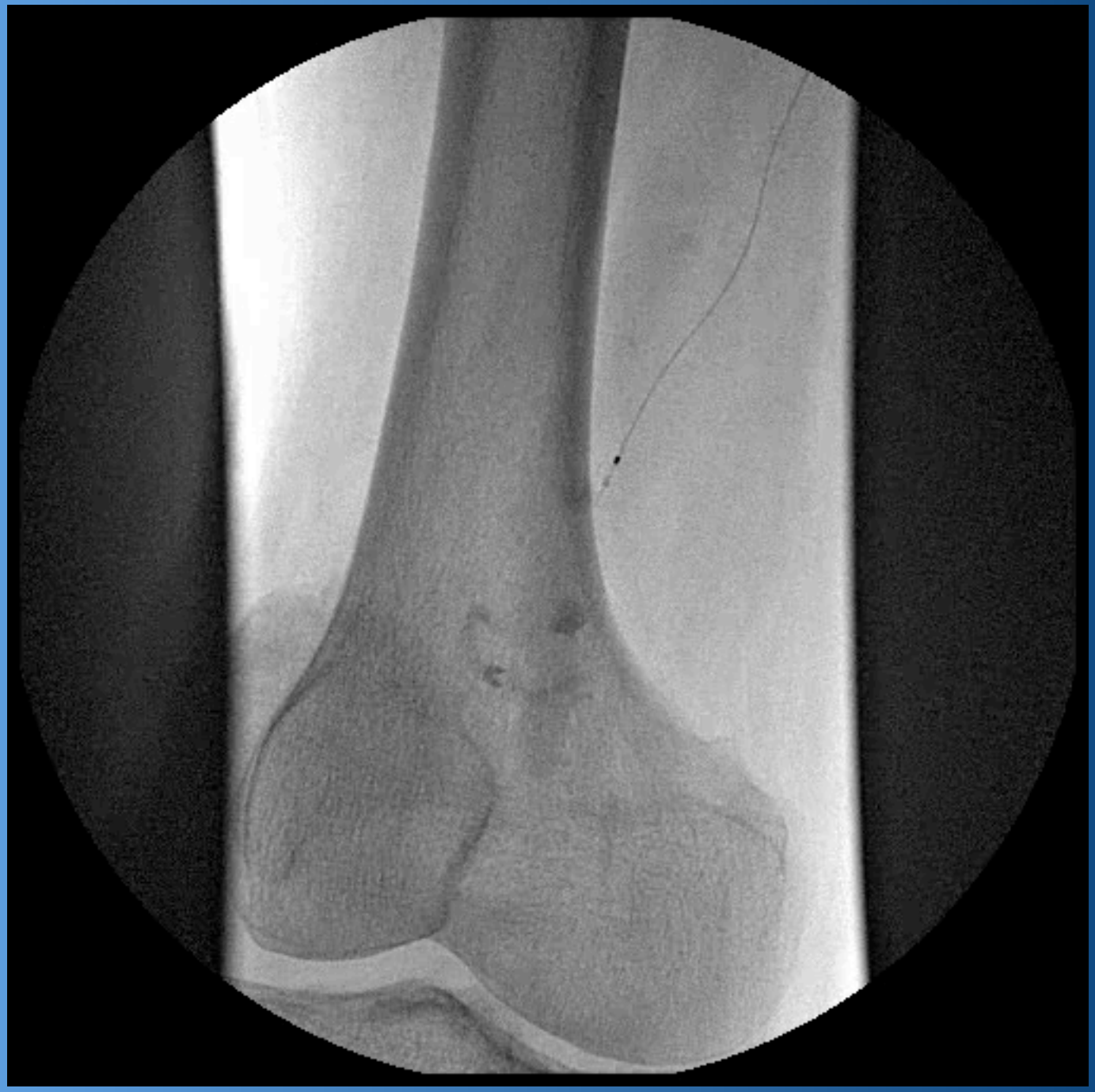






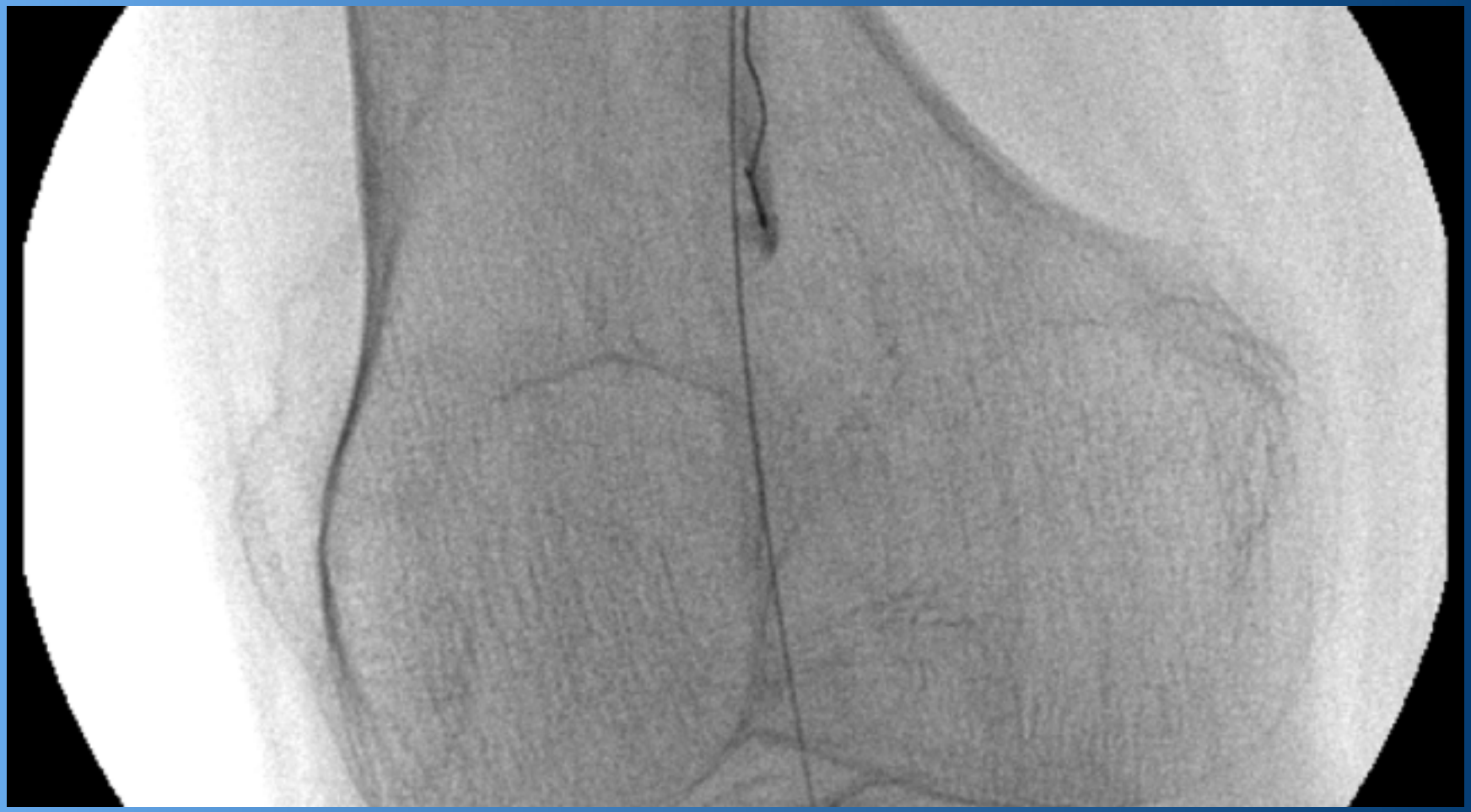


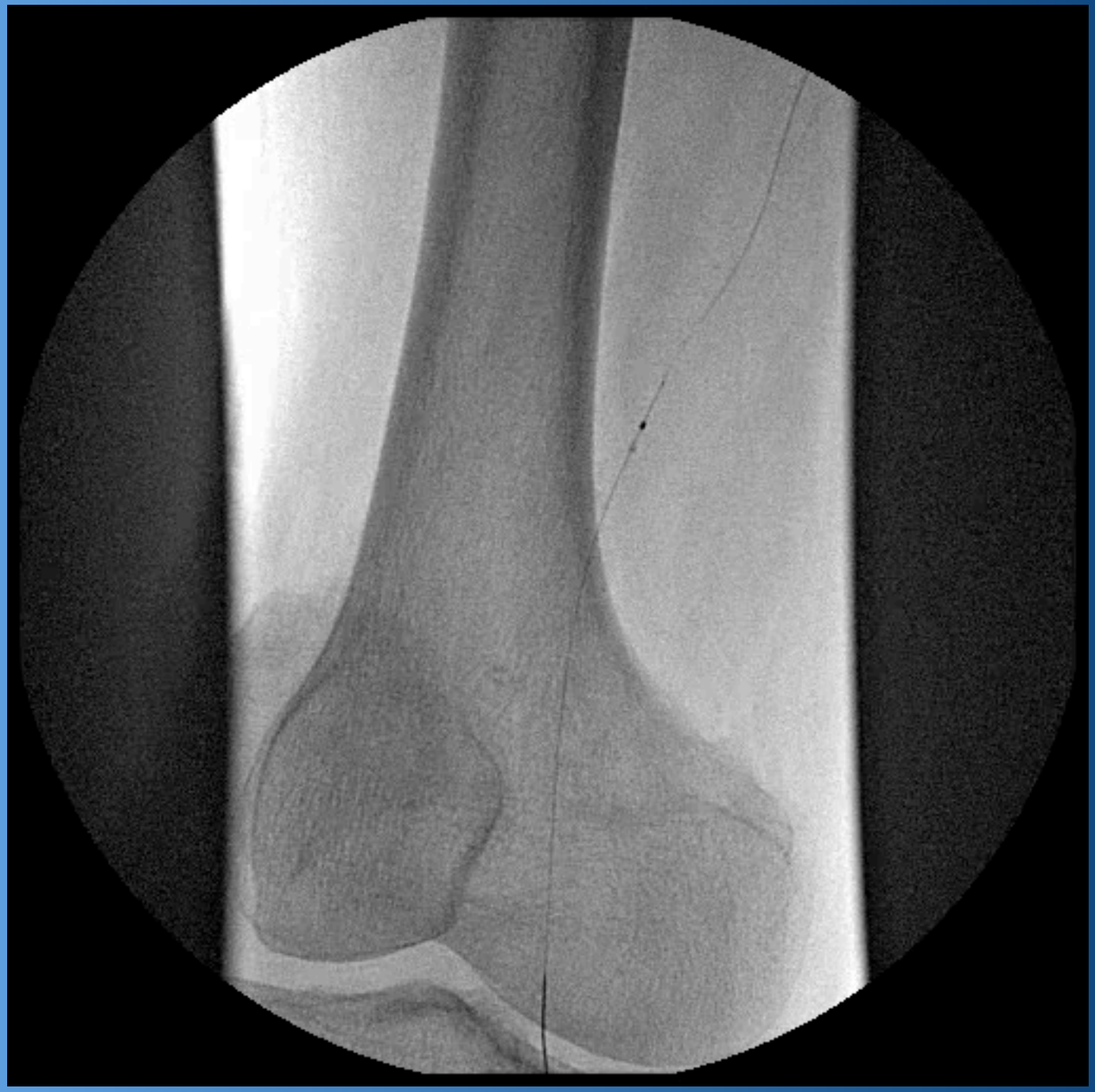


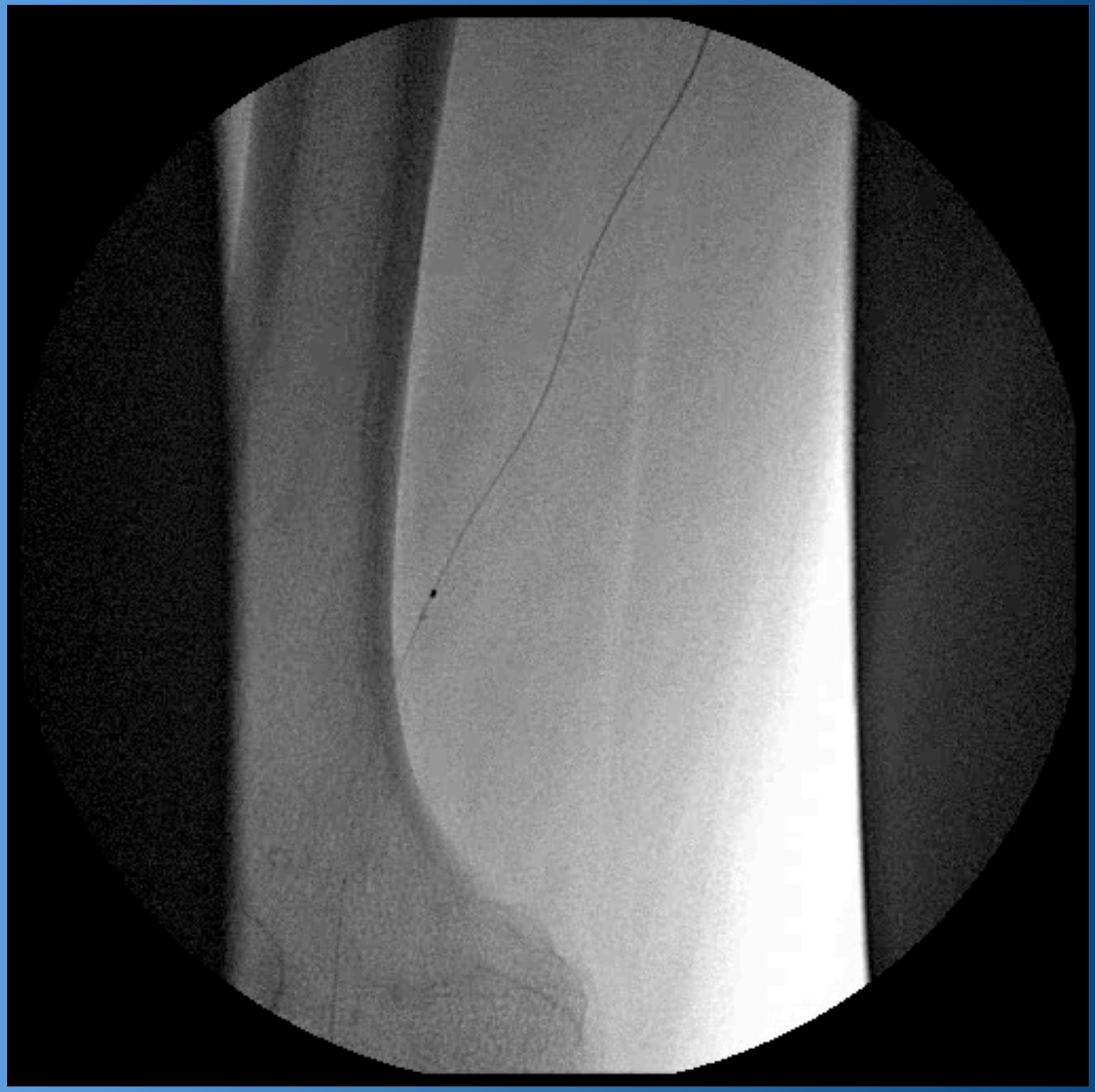


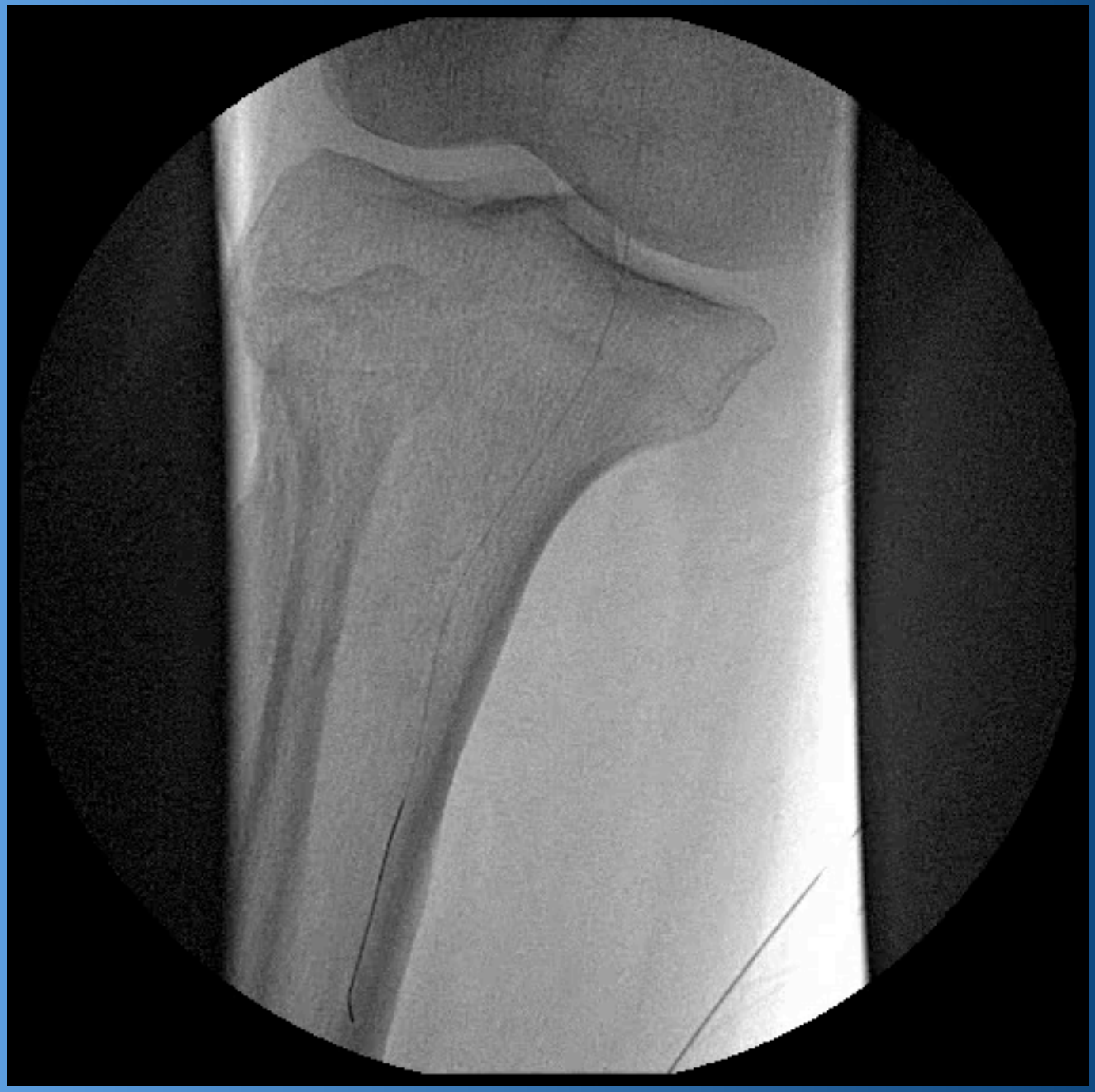
Re entry

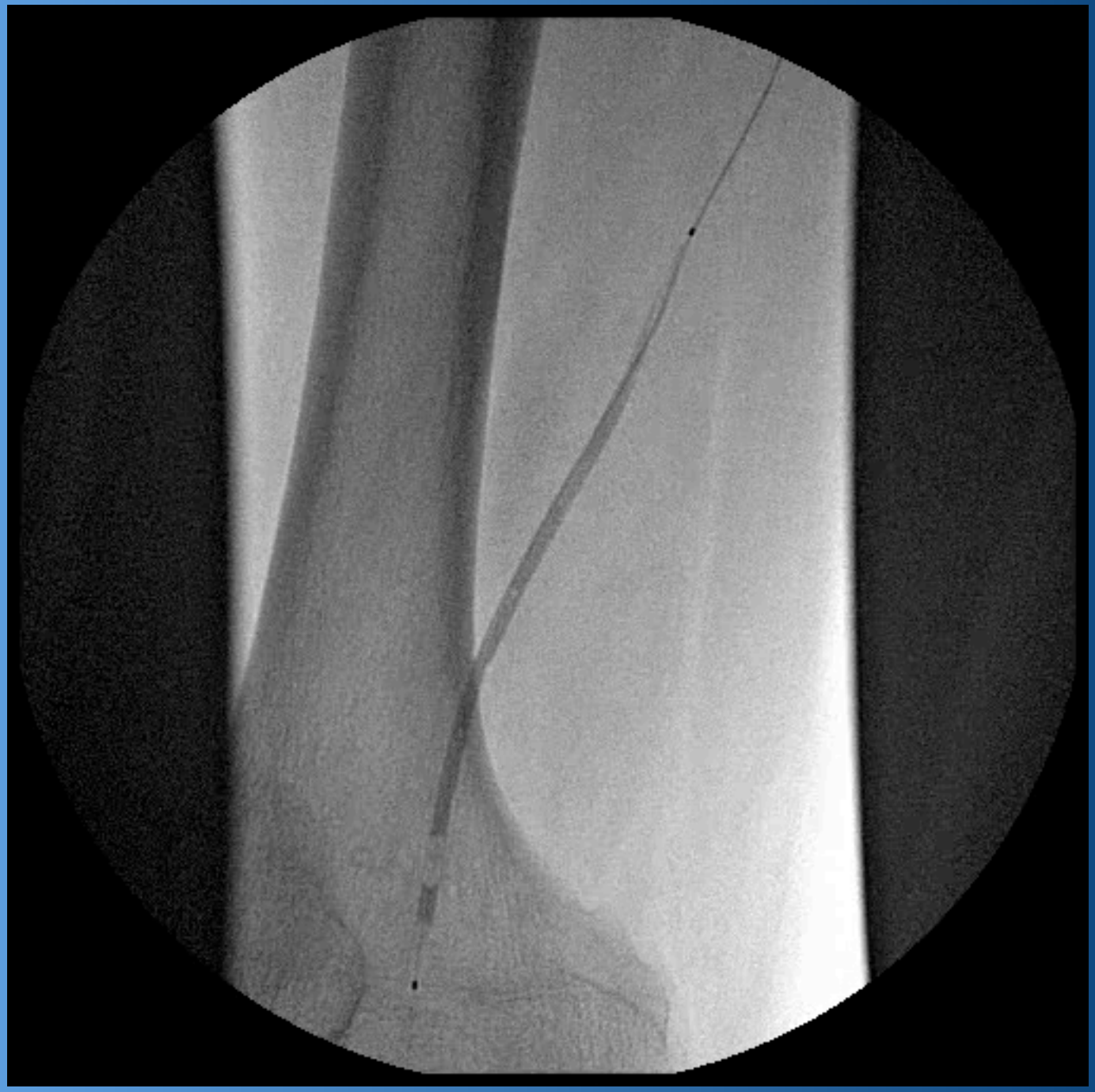
- Export catheter used as a reentry device
- Standard wire with special curve to tip

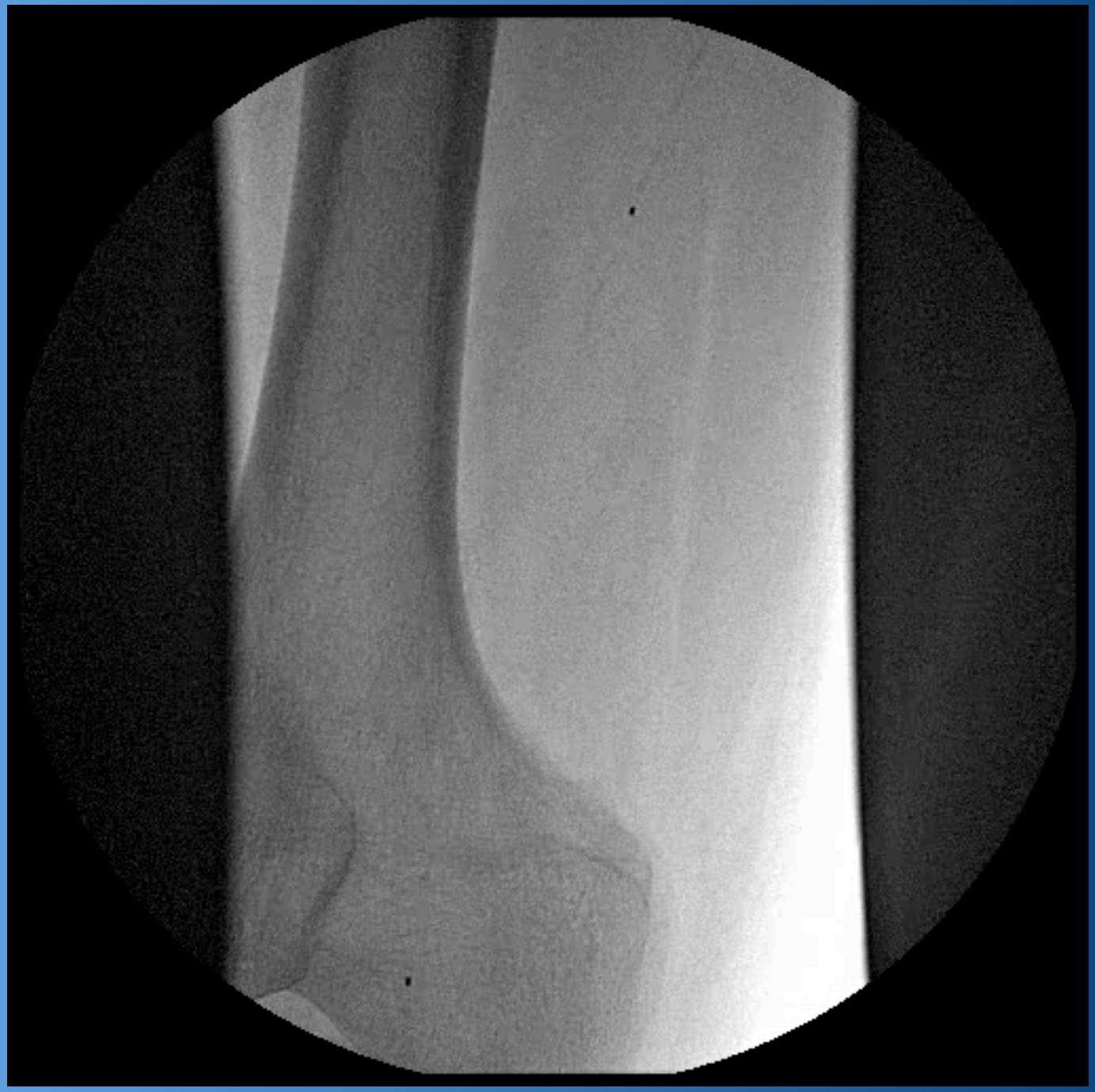






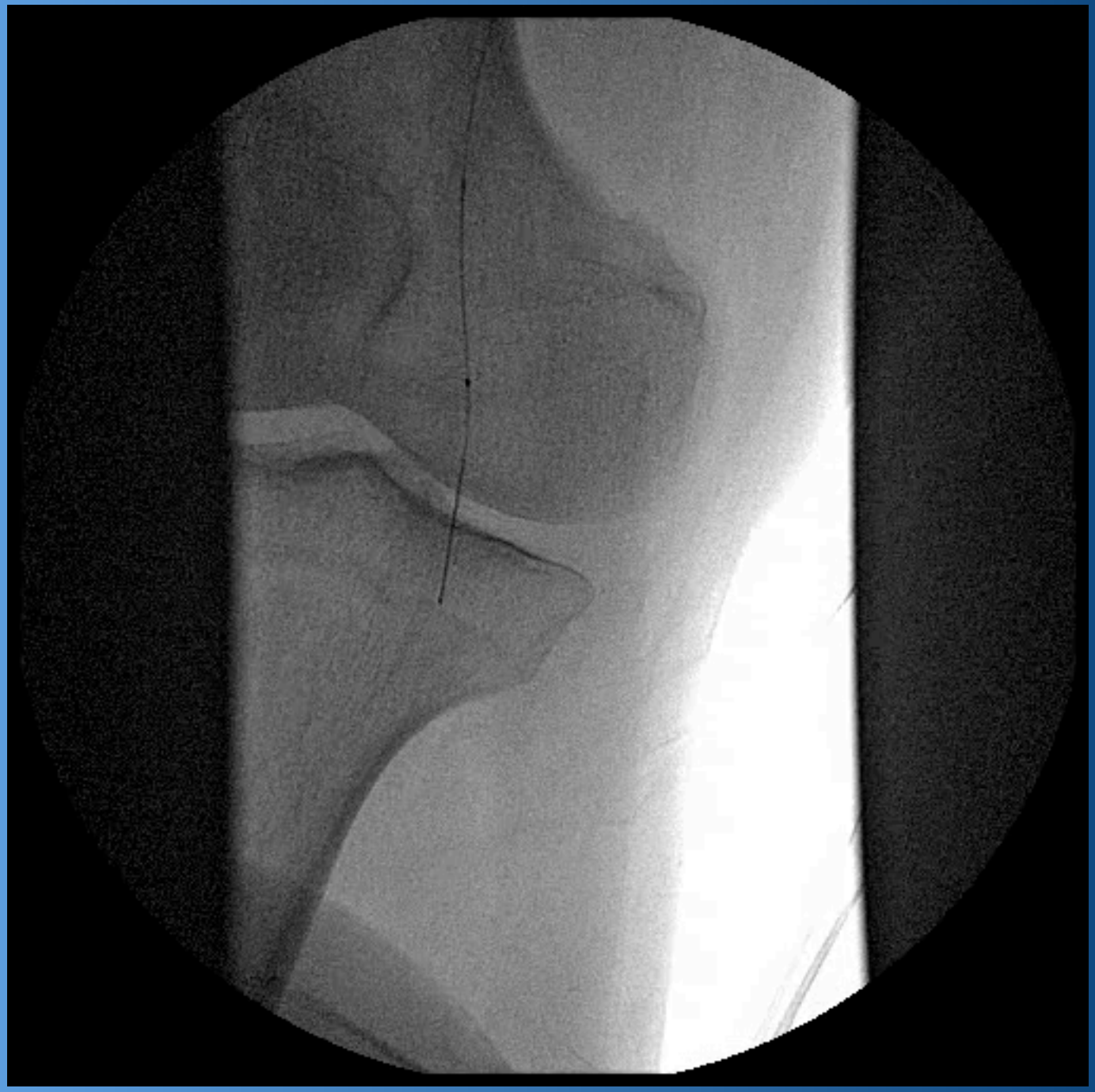


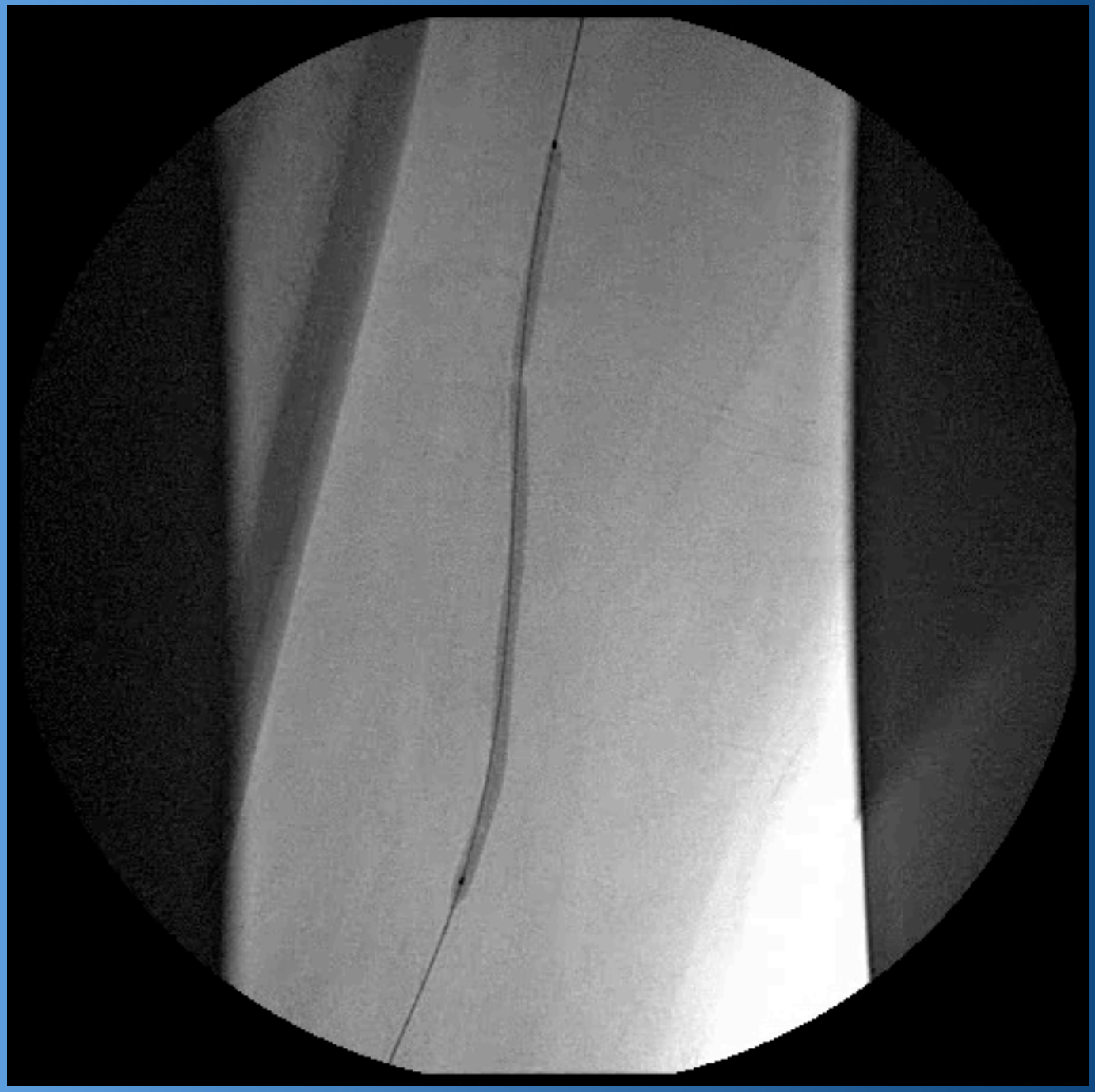


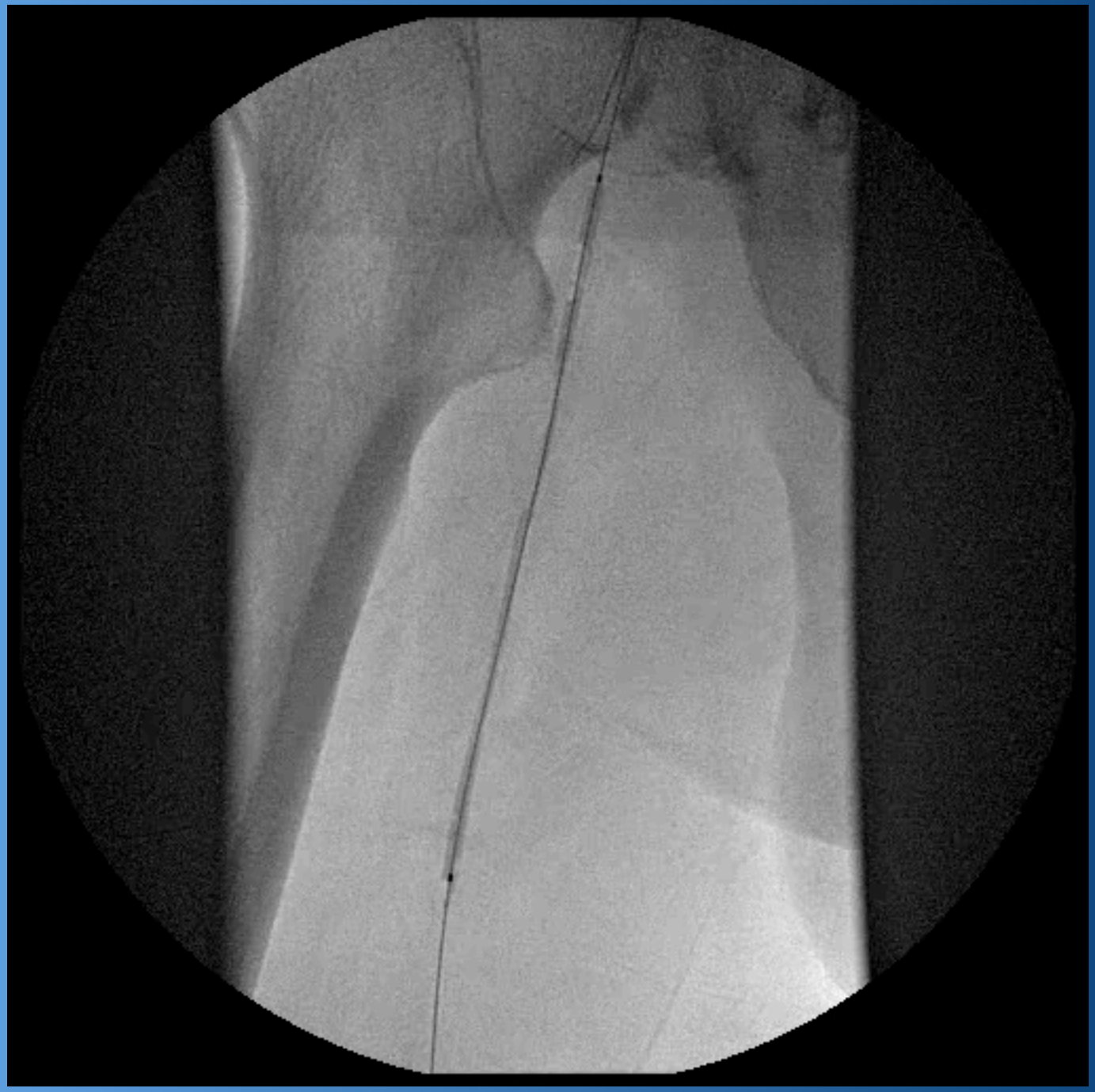


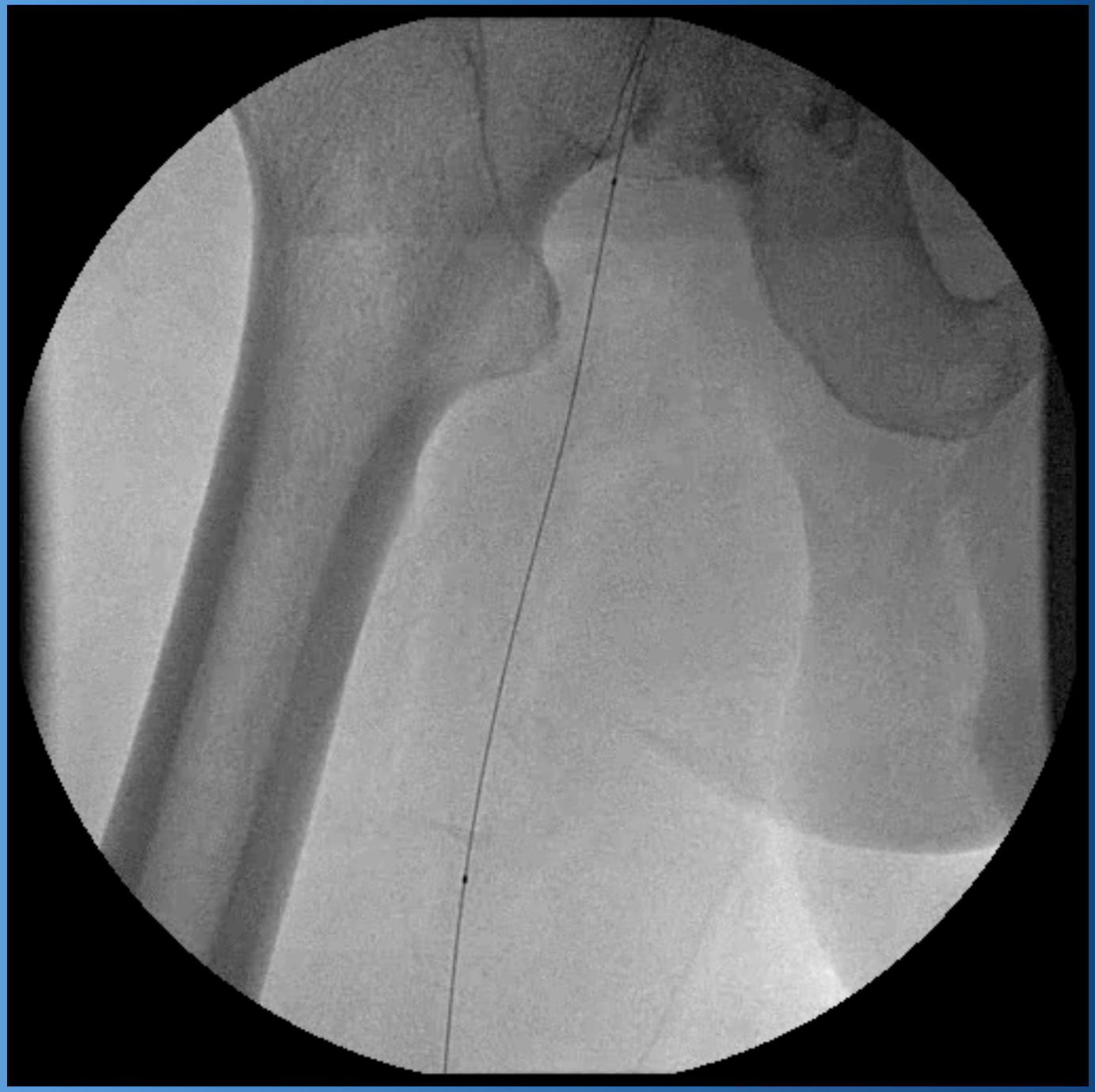
Wire exchanged for 0.018

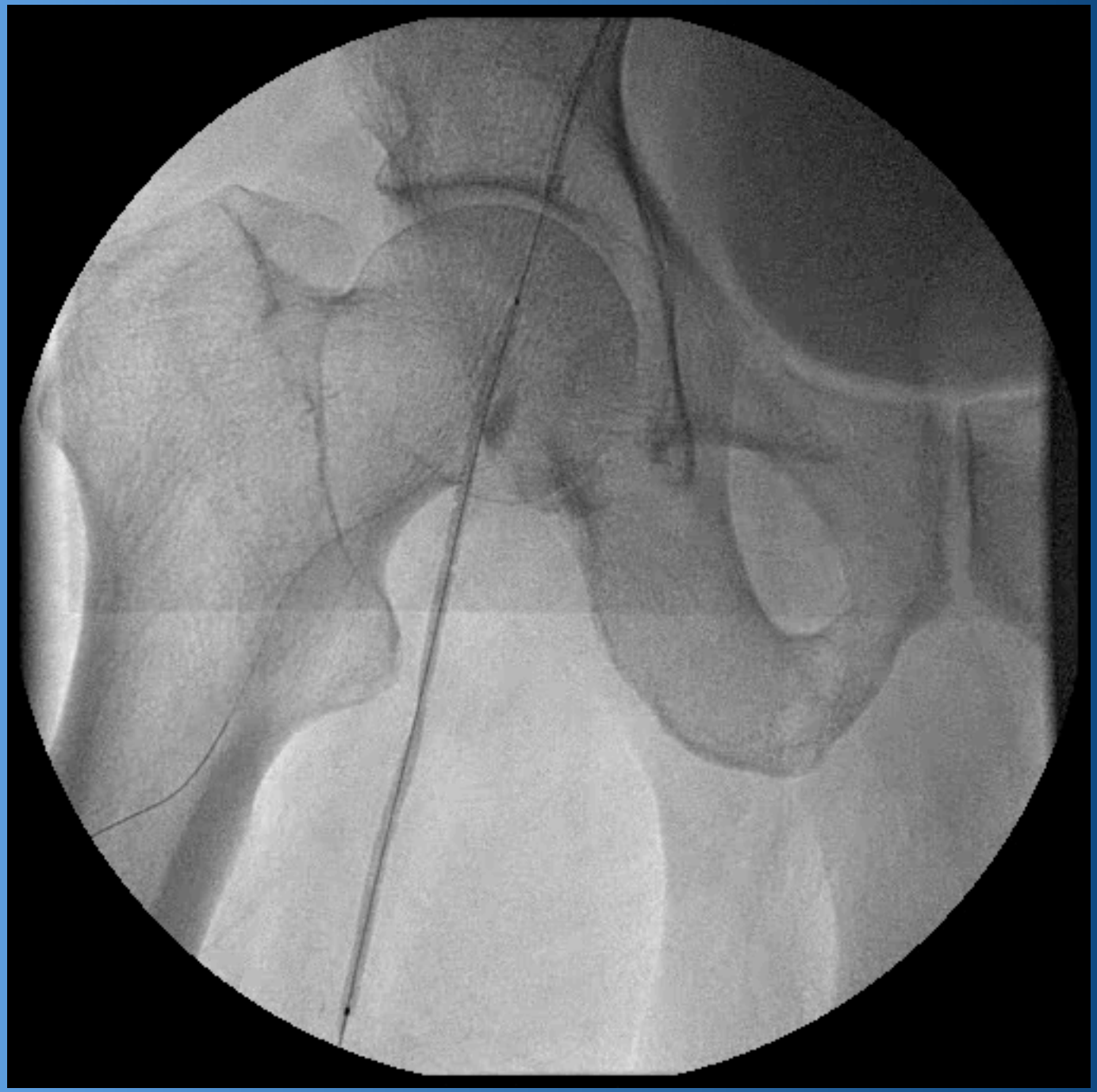
- Biotronic cruiser 18 exchange length medium support

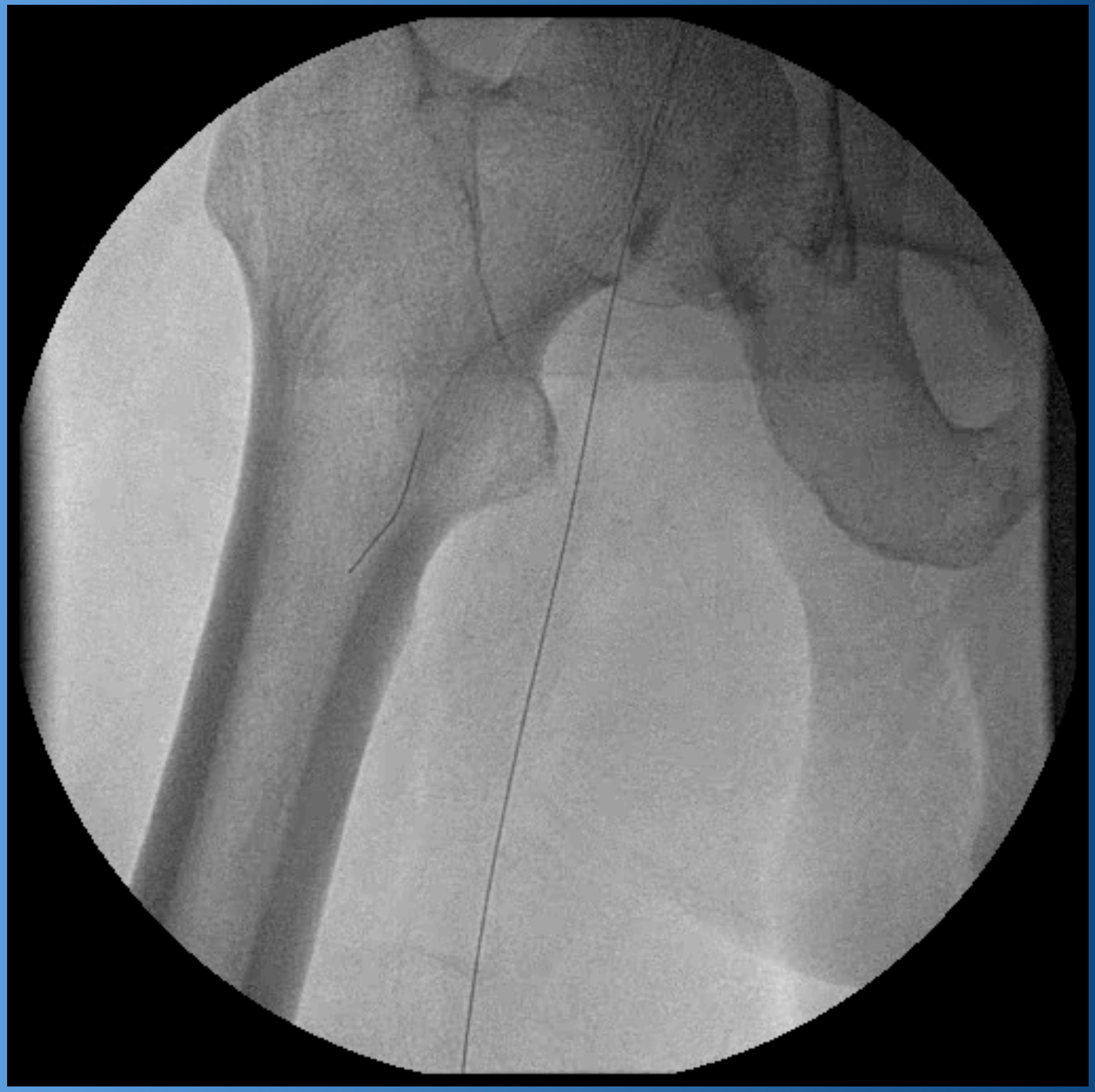




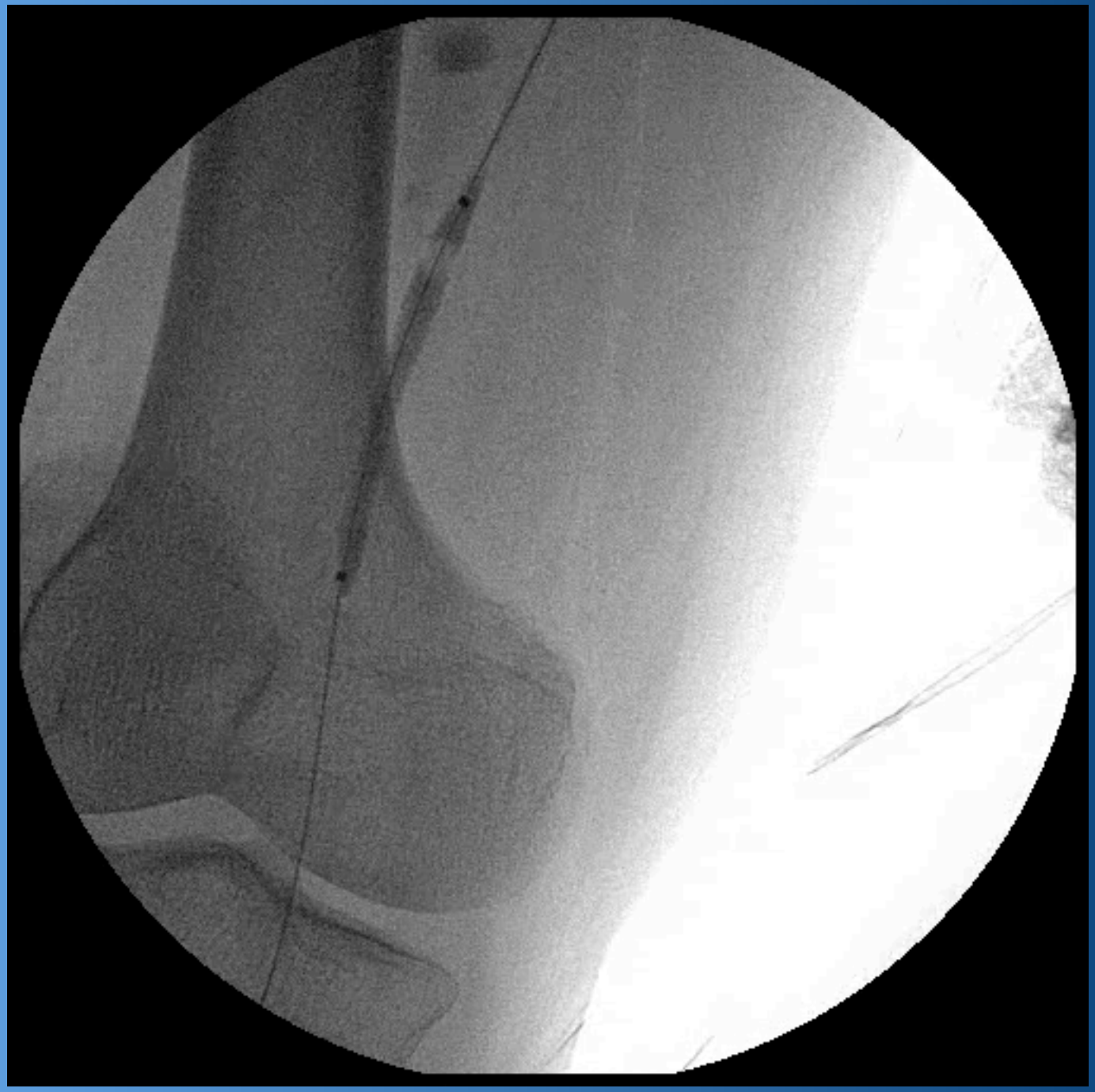


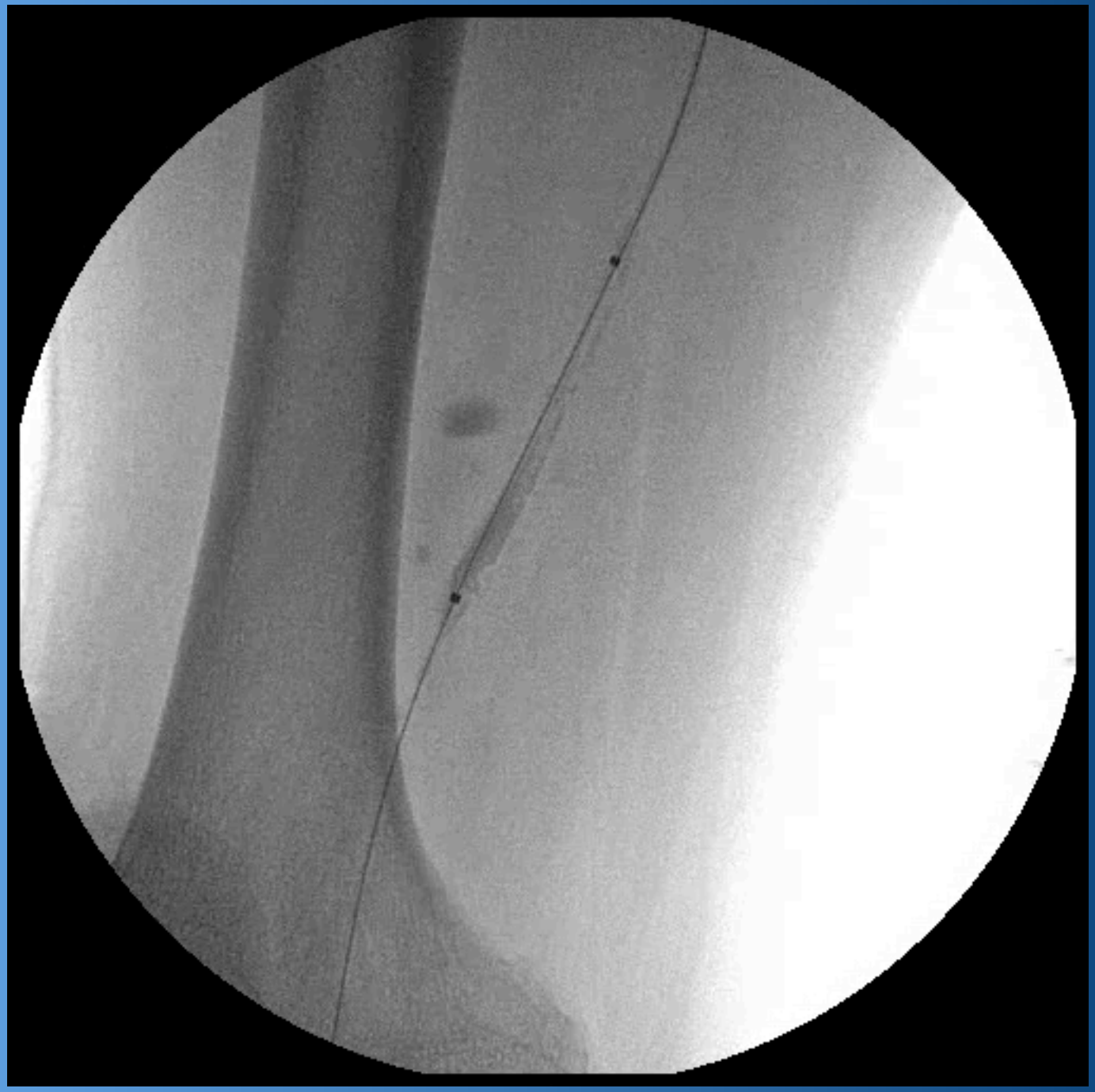


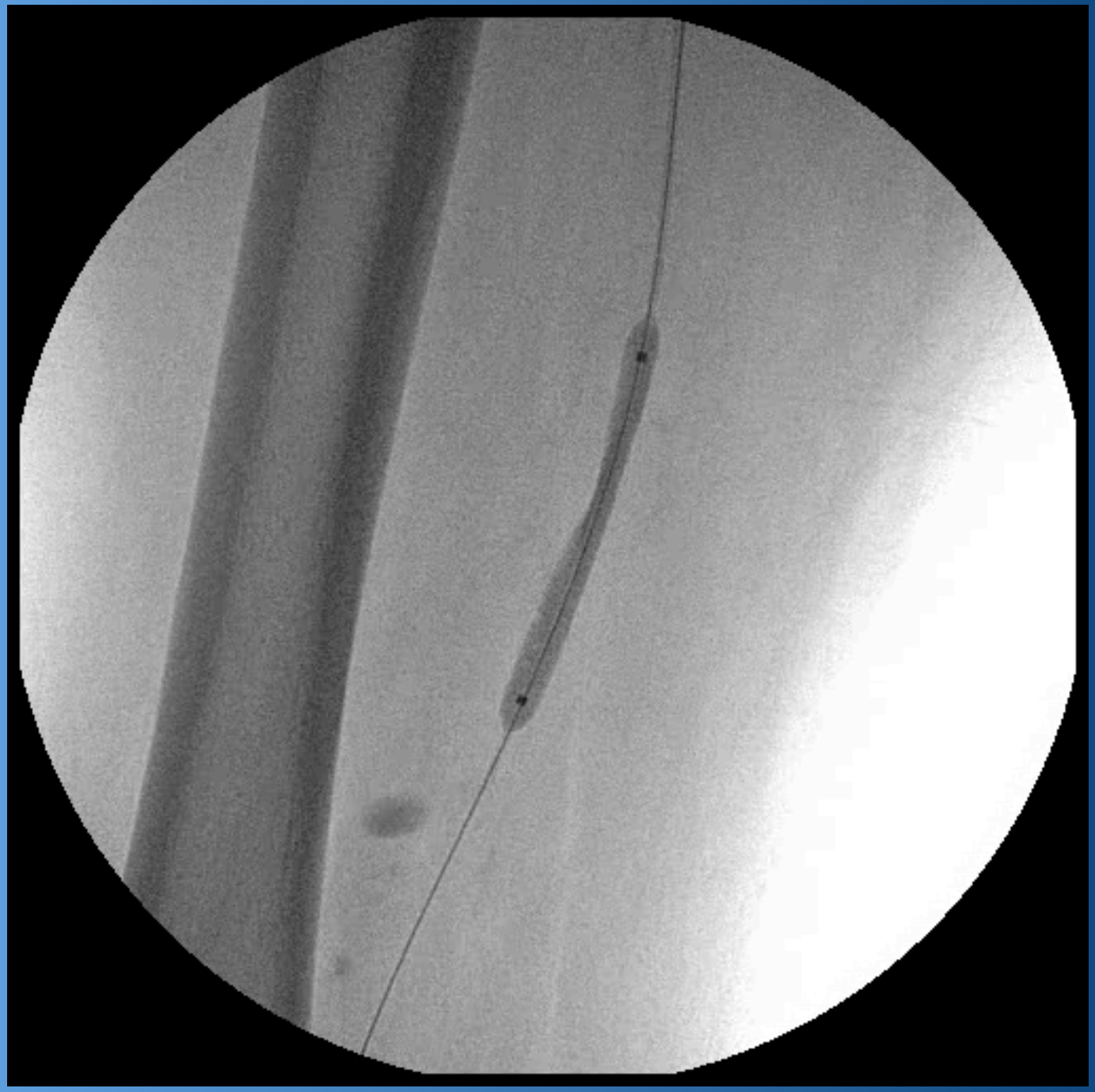


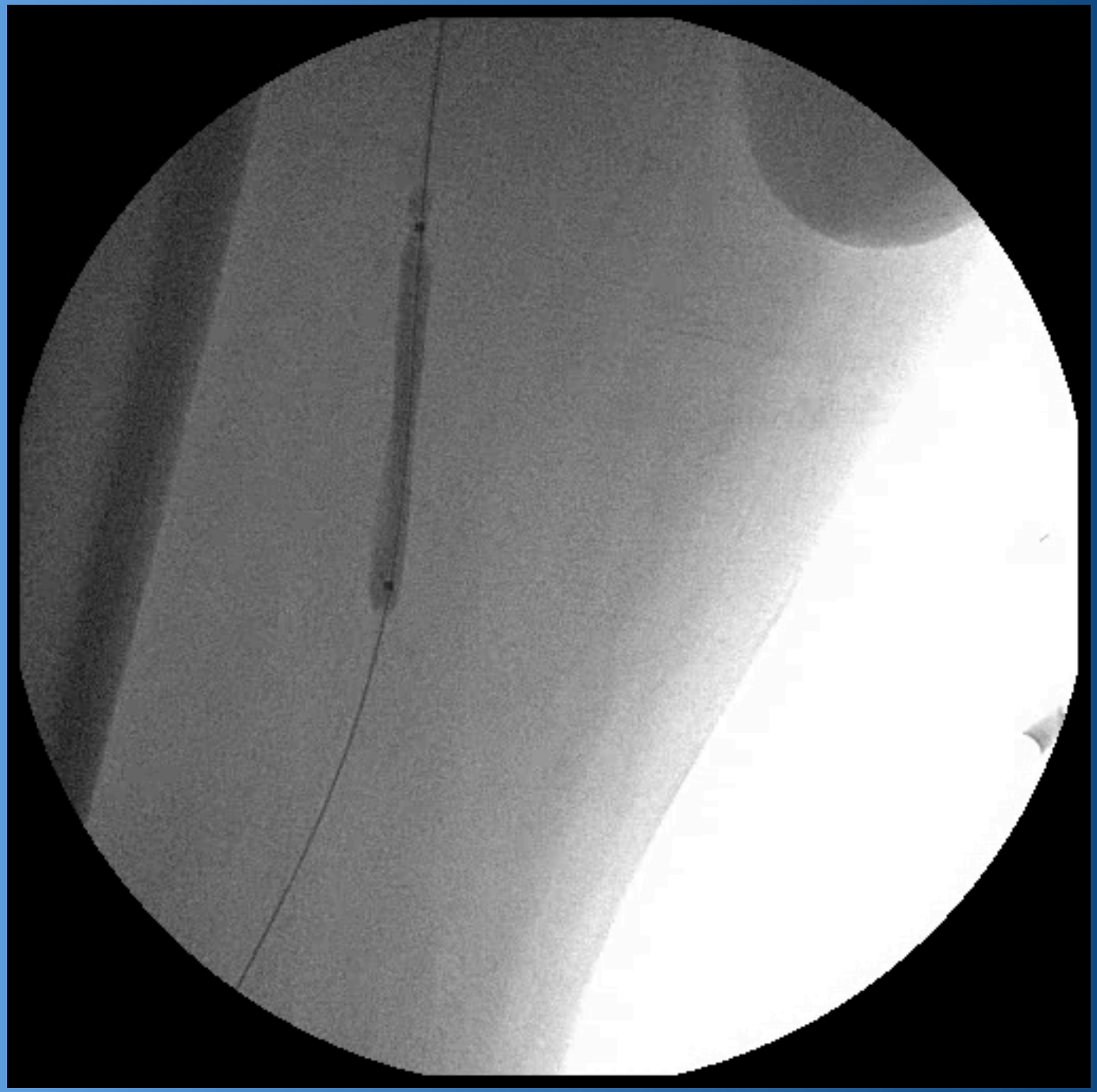


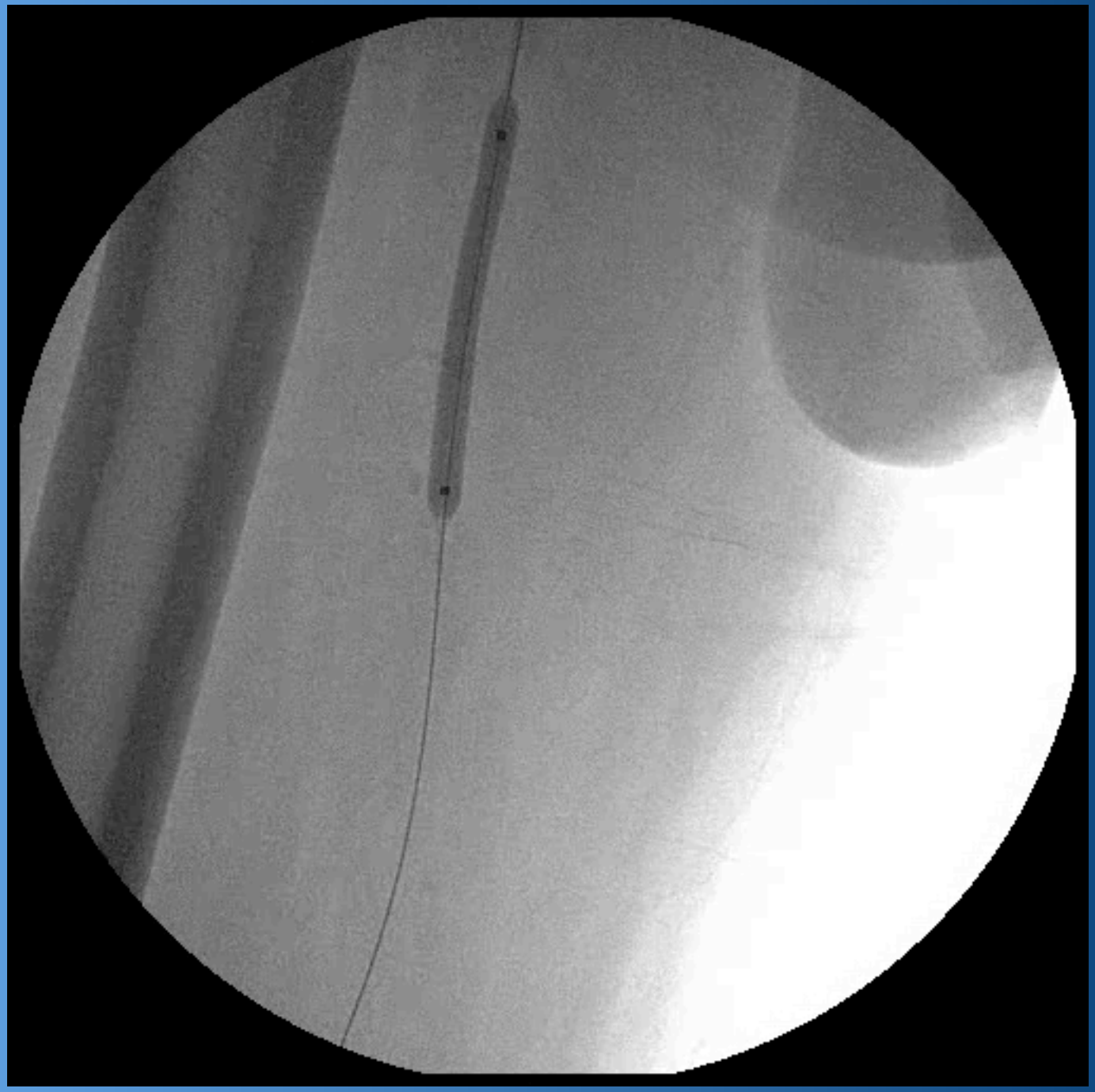
6 x 60 Cook balloon OTW

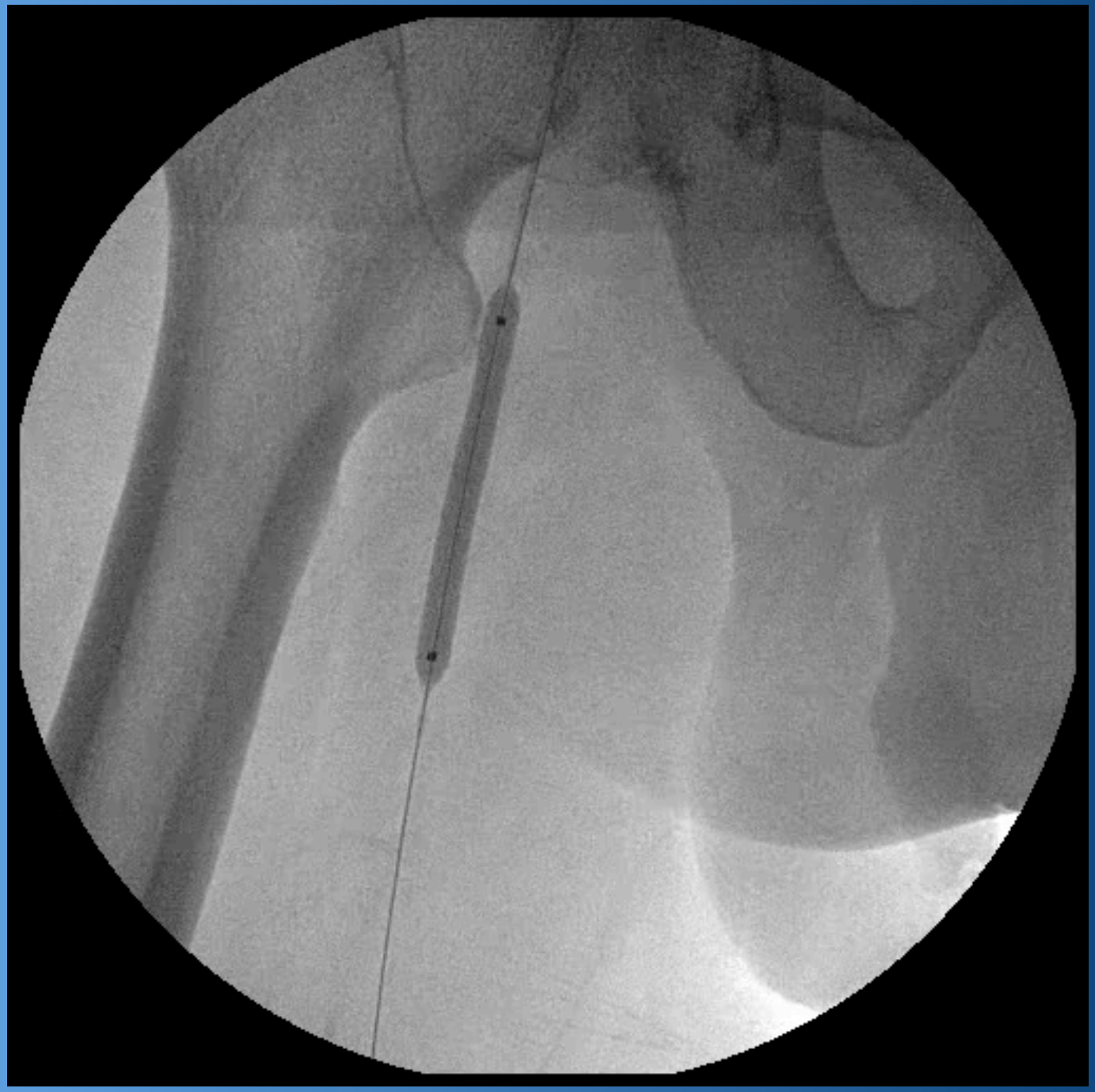


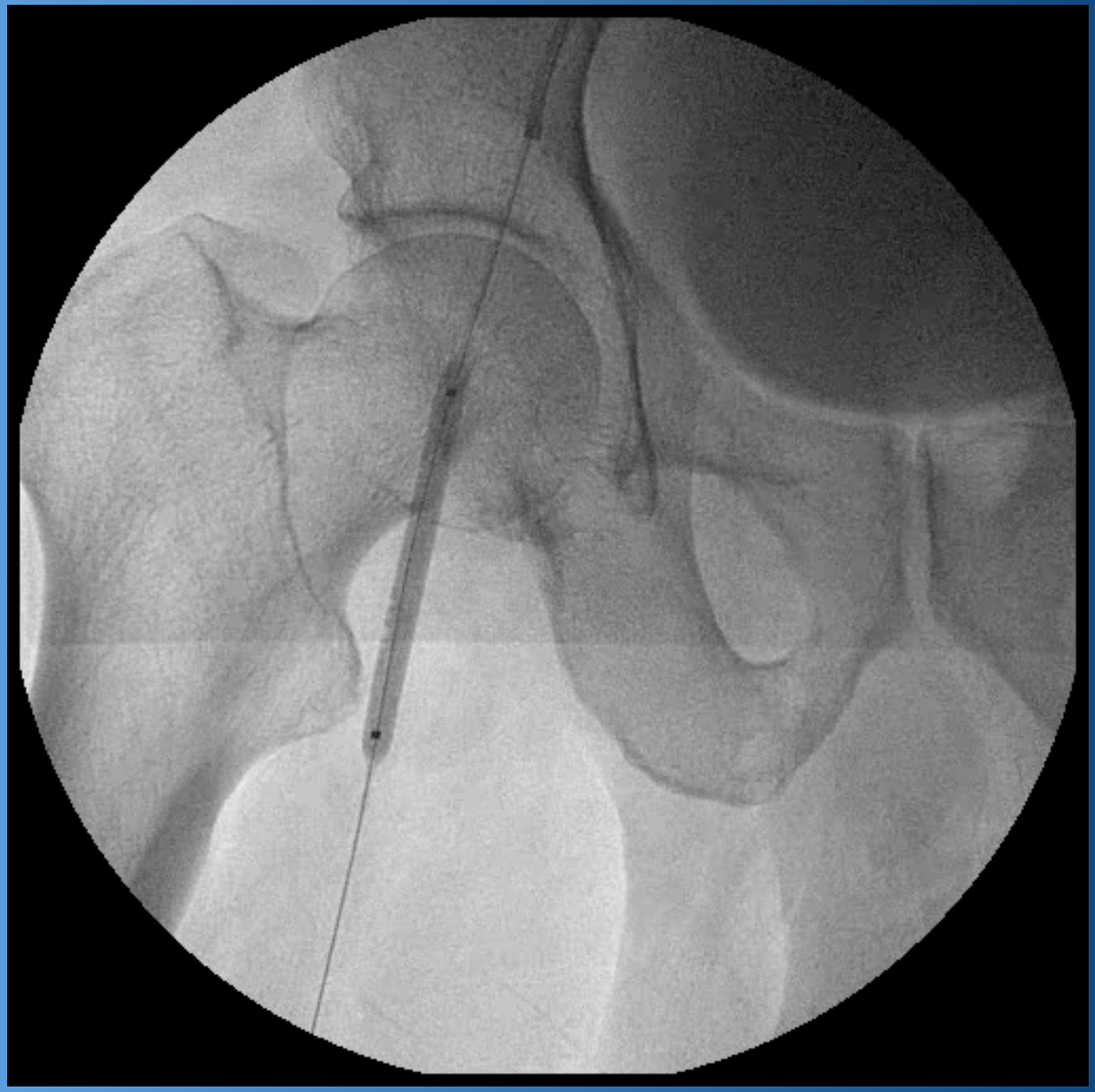


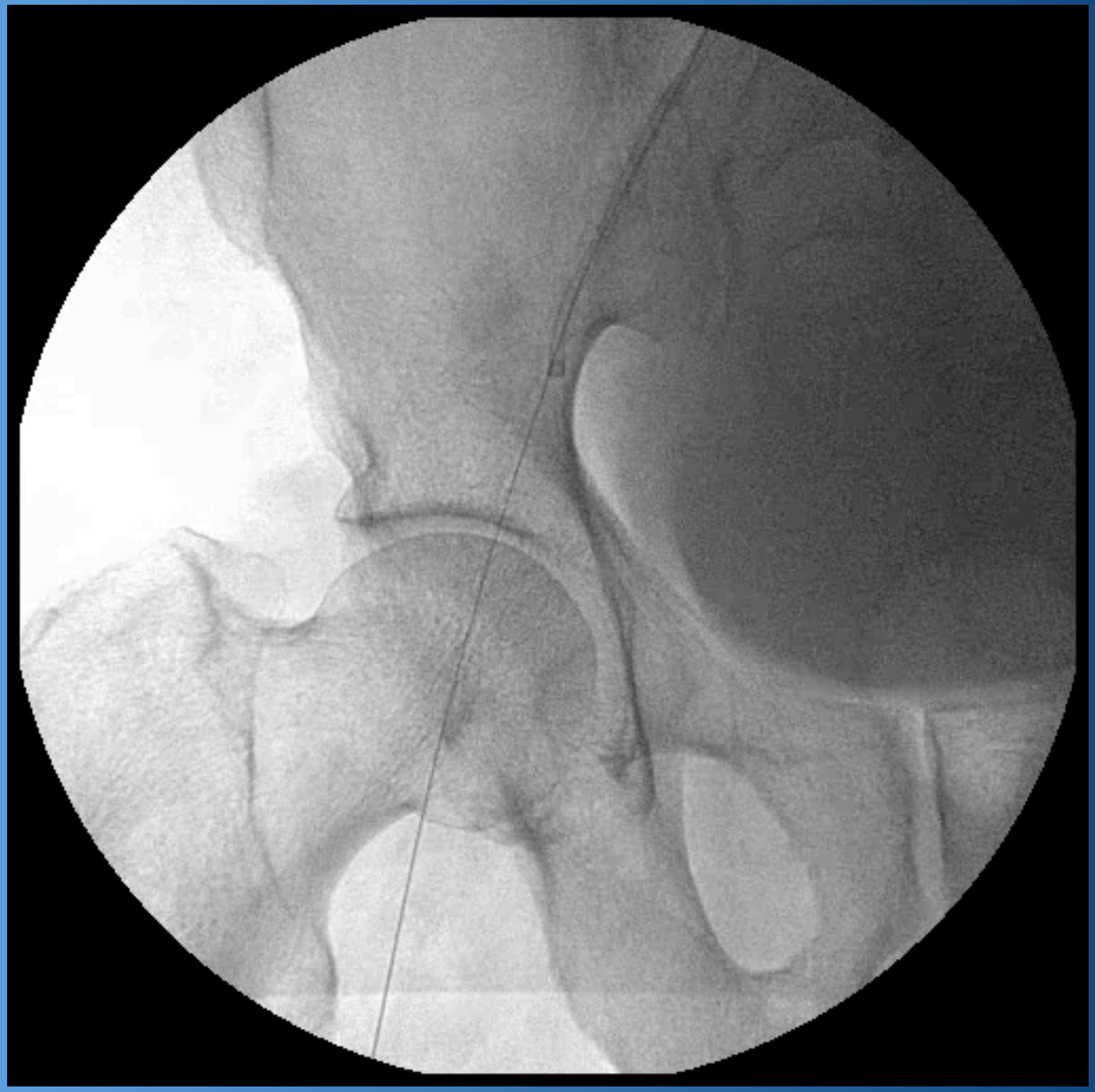






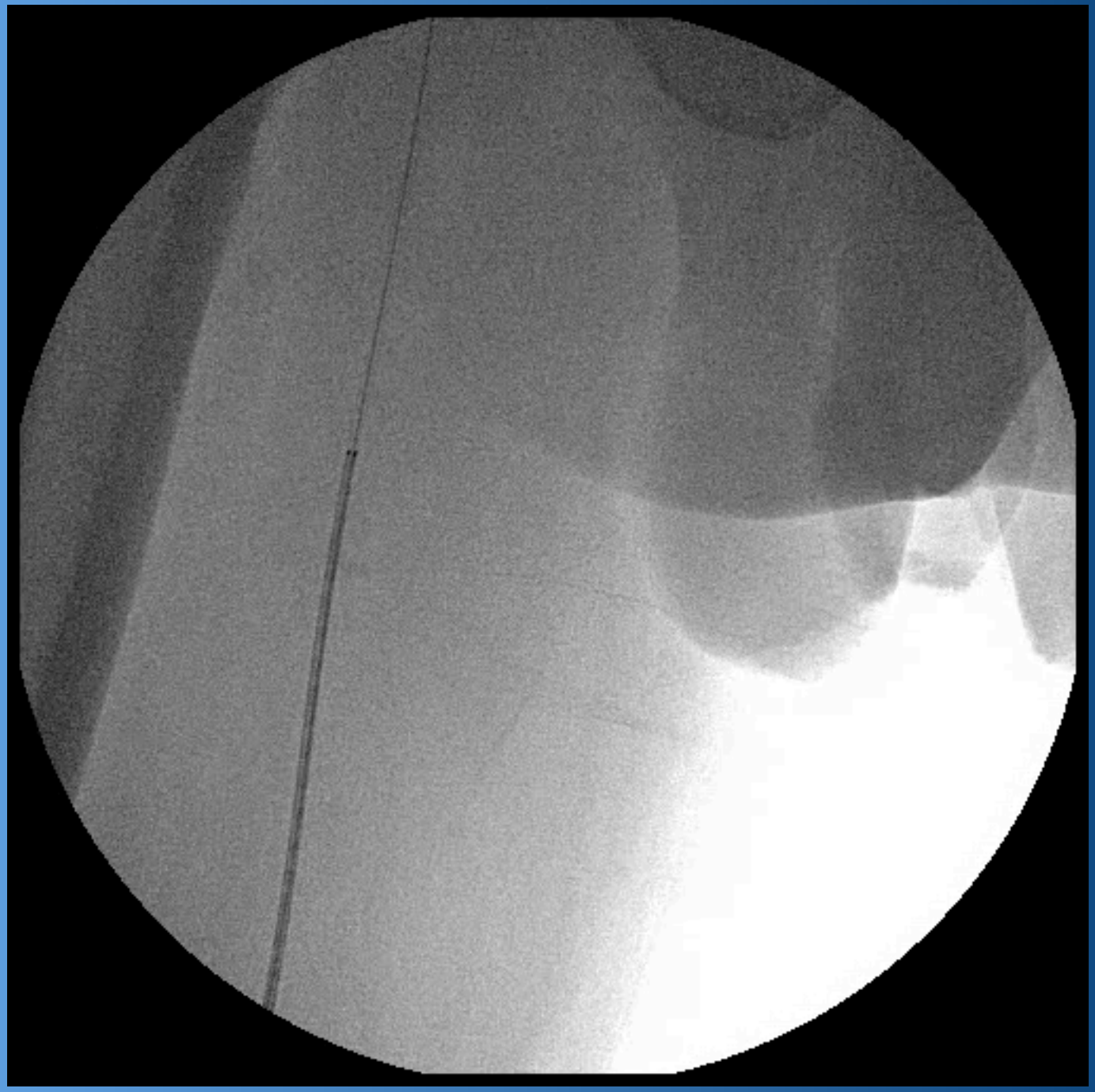


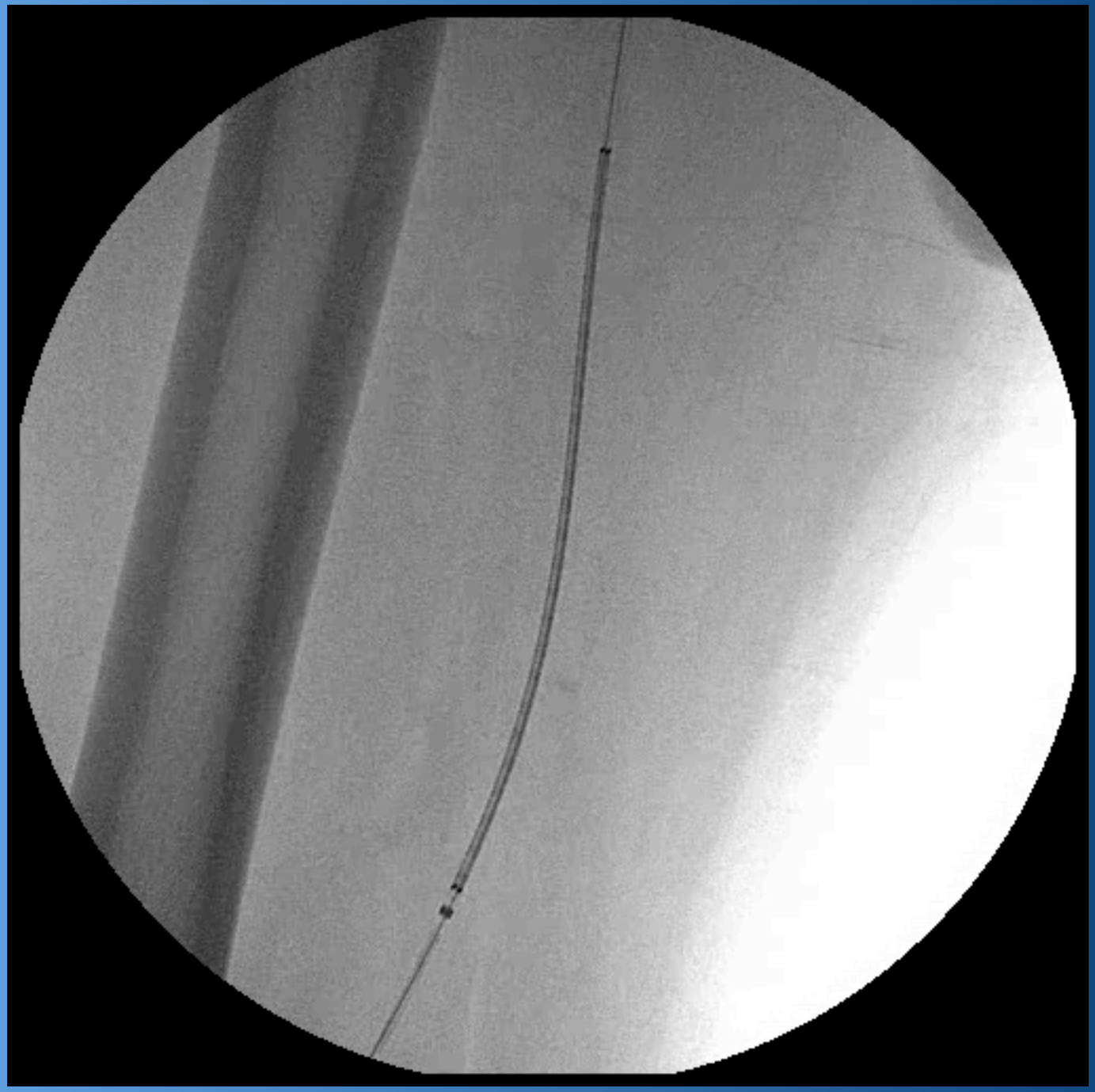


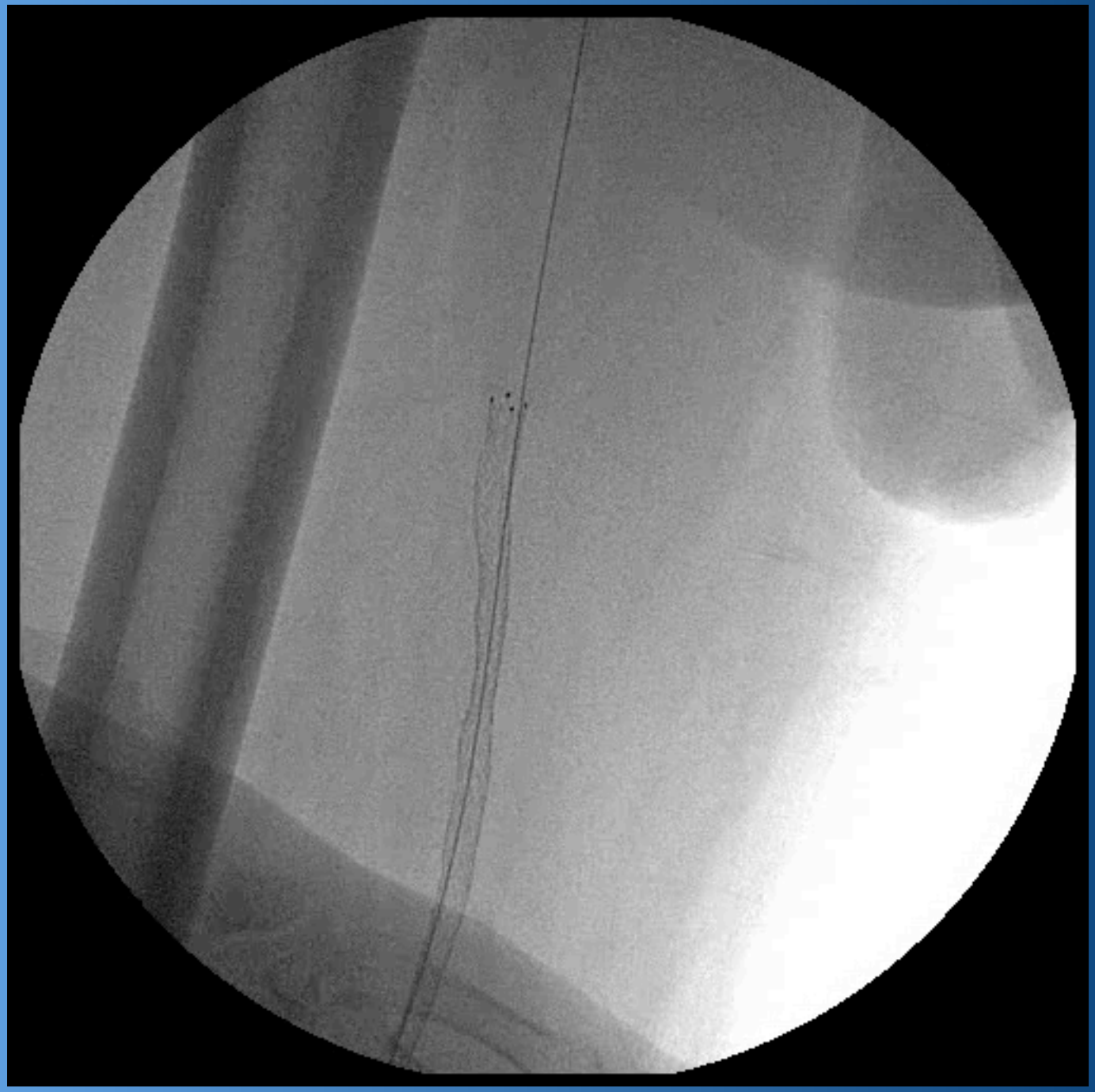


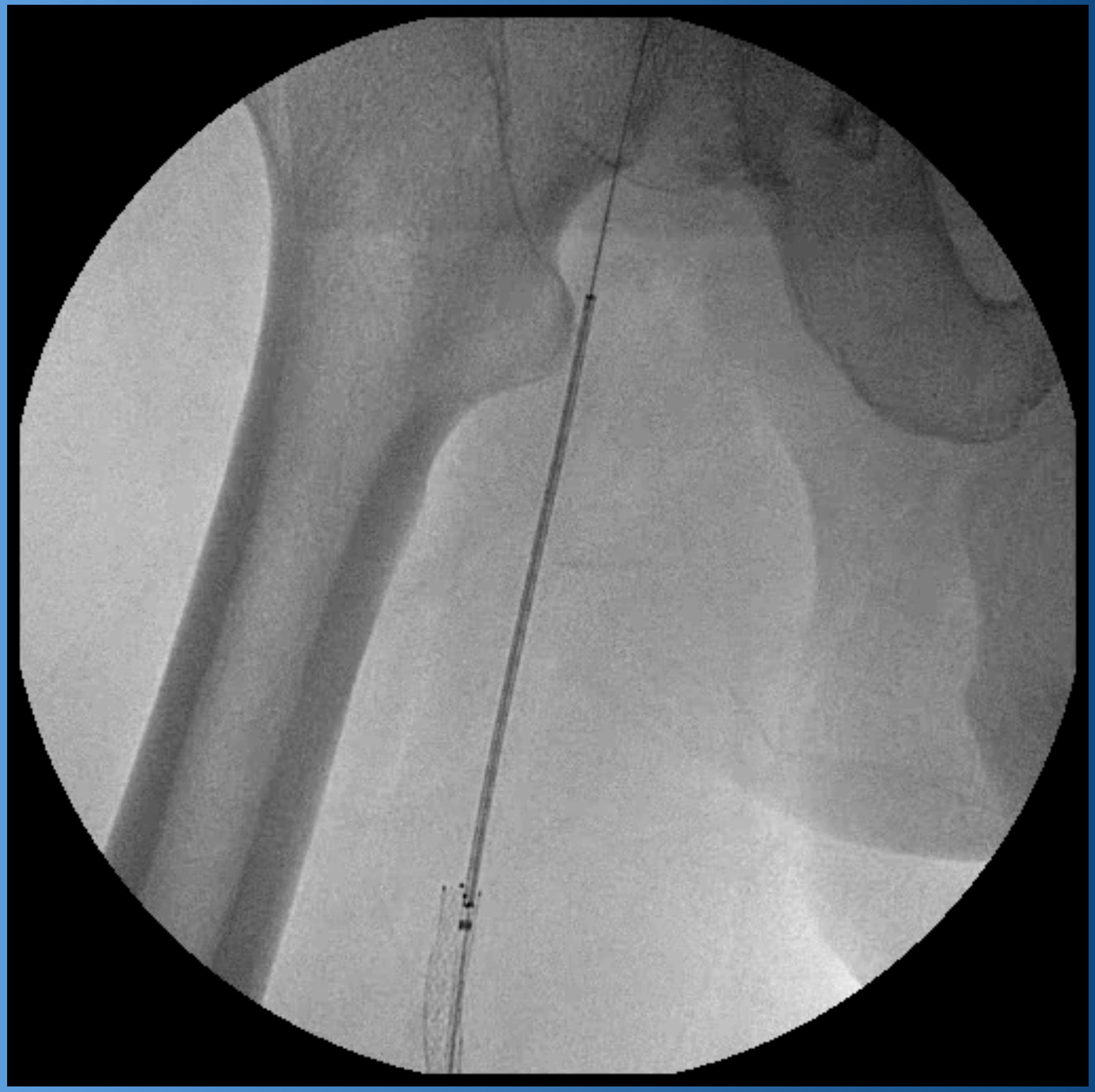
7 x12 and 7 x10 Zilver

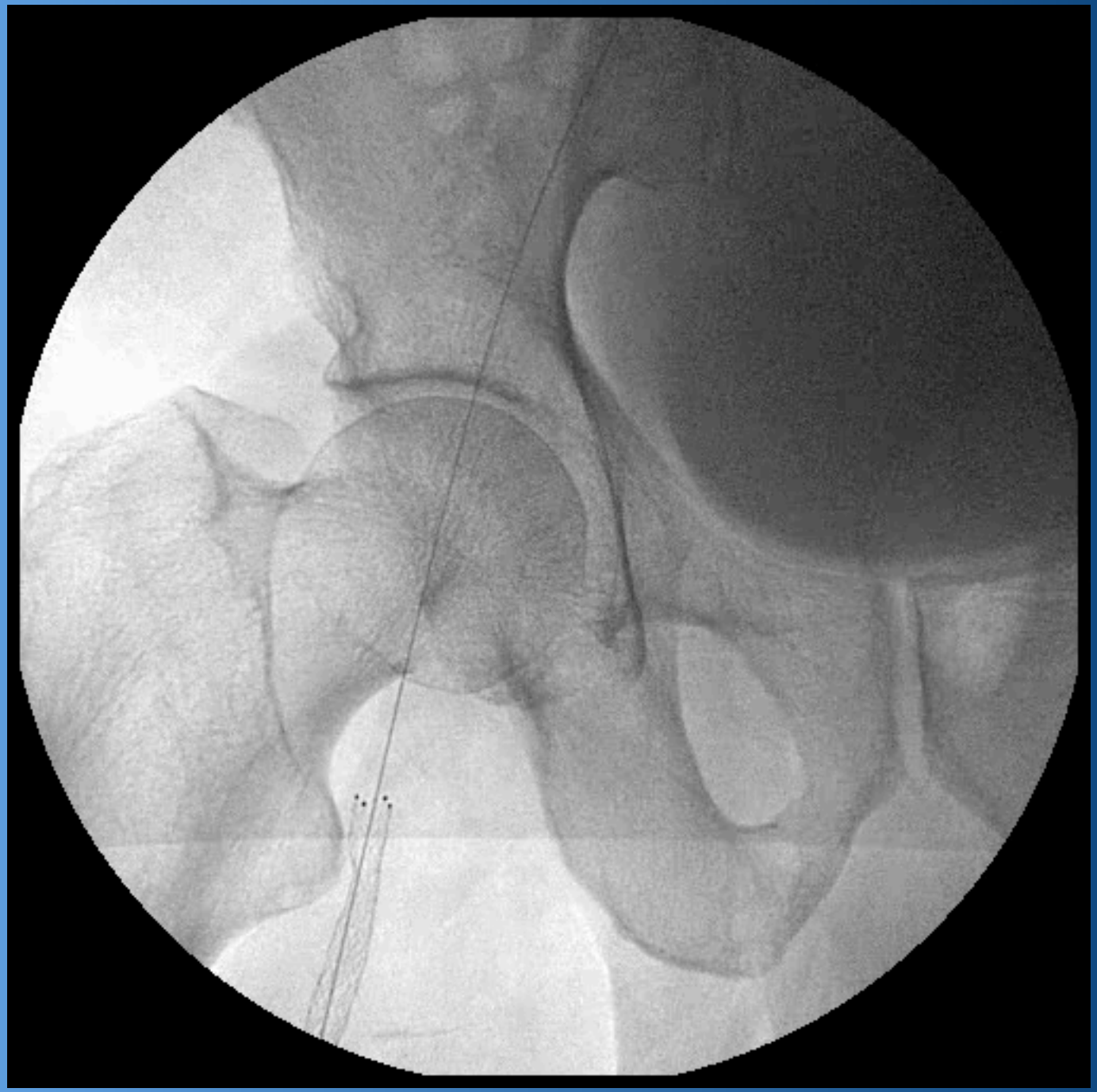
- Self expanding stents to cover the sub intimal areas





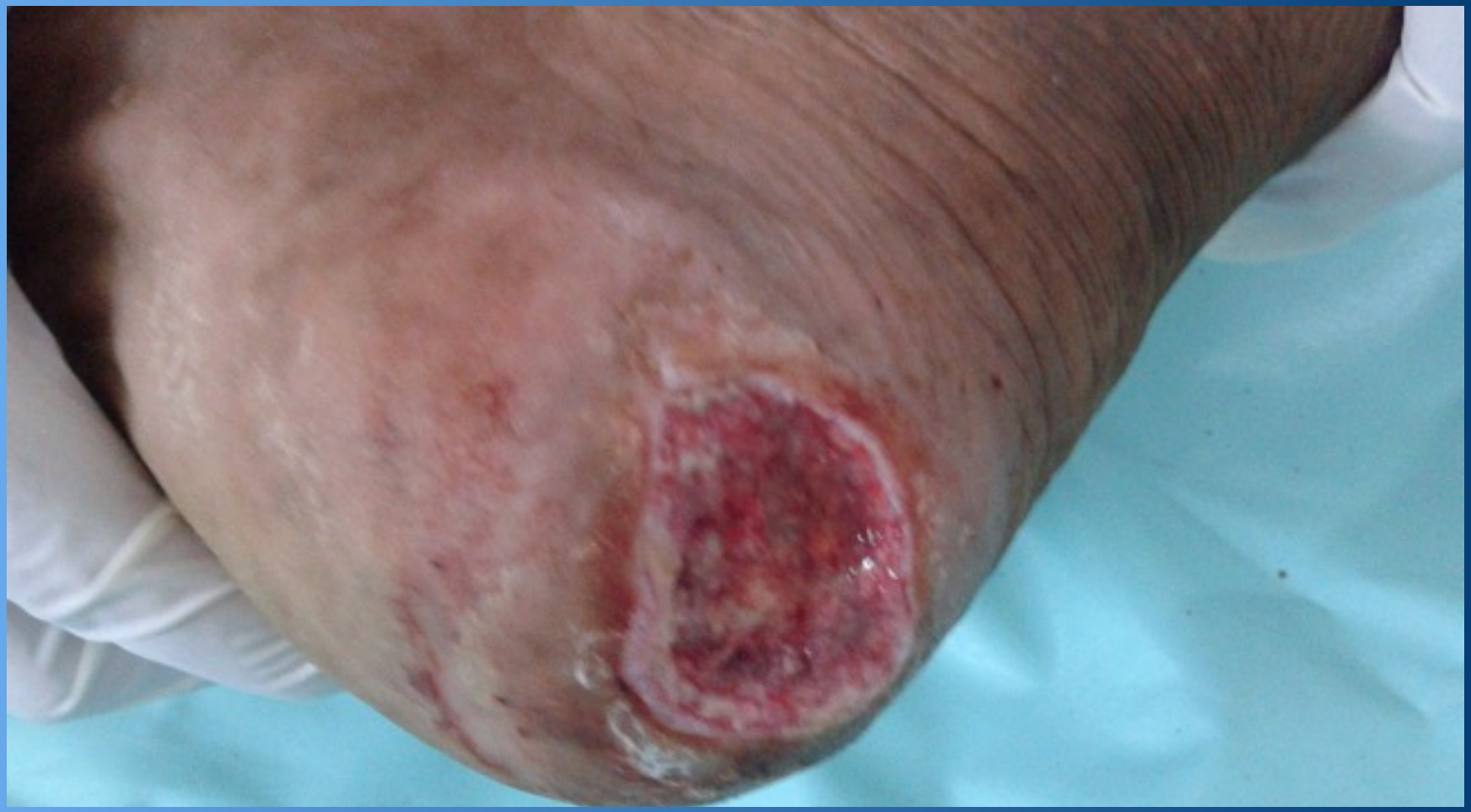




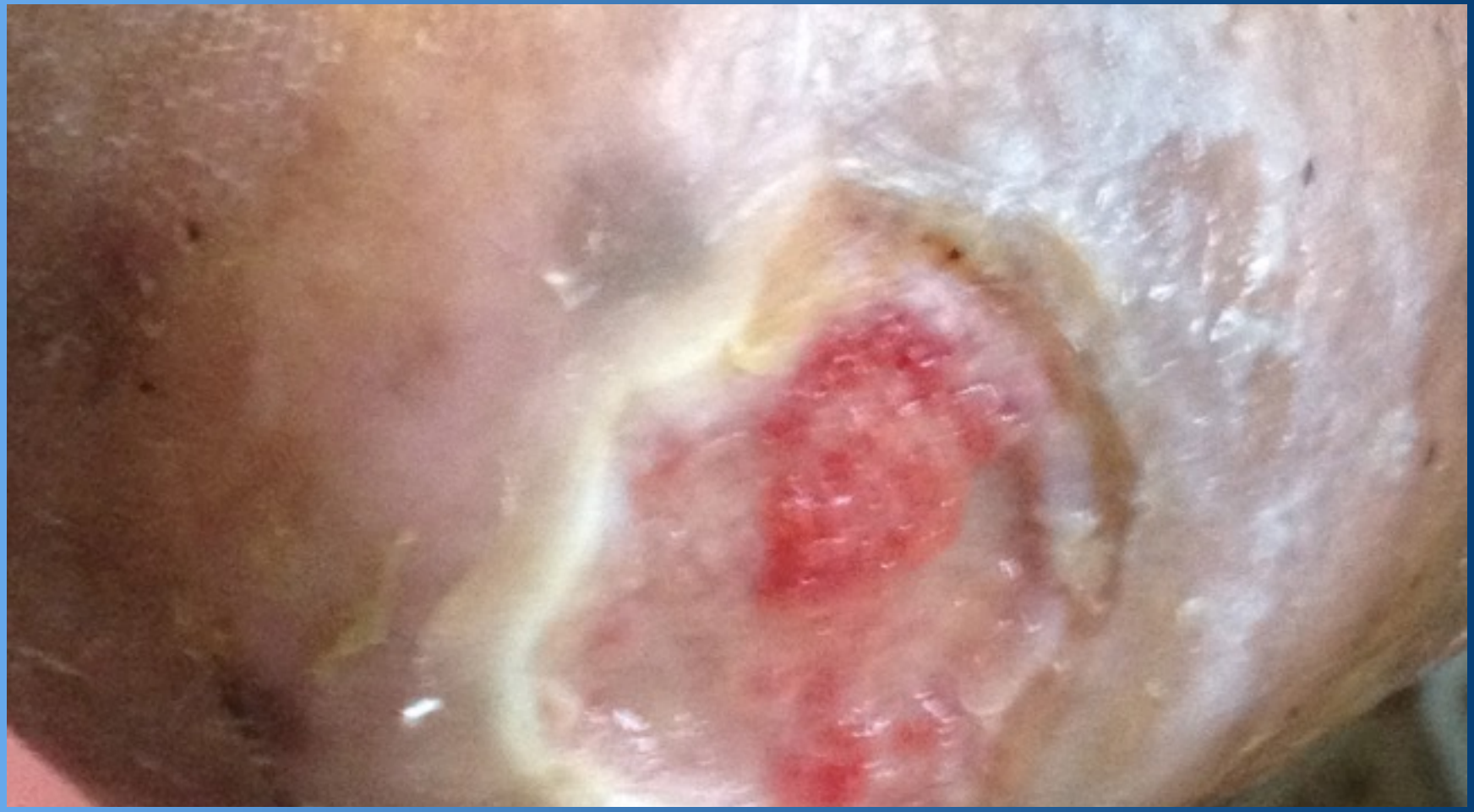


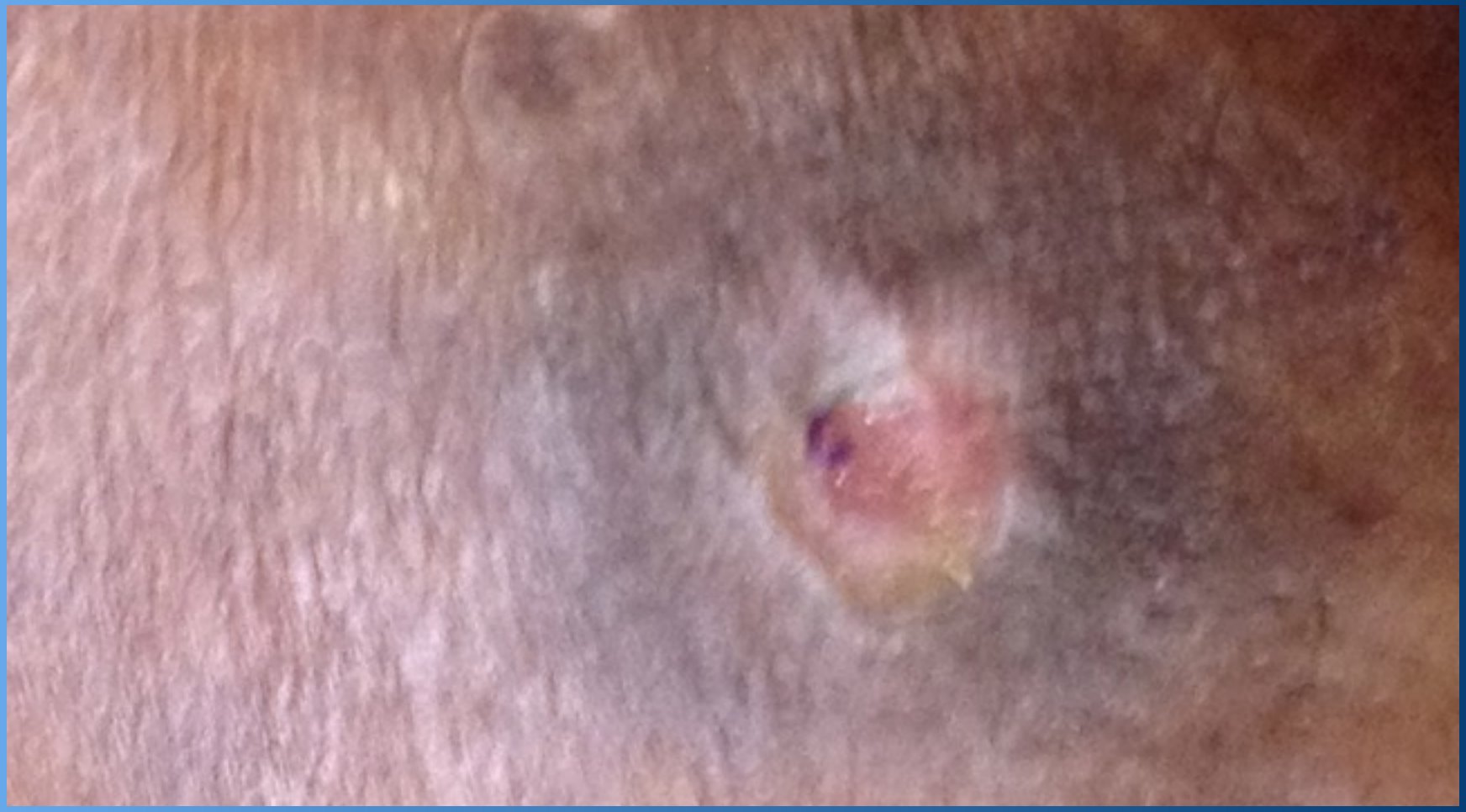
Follow up

- Wound debridement done after 2 days

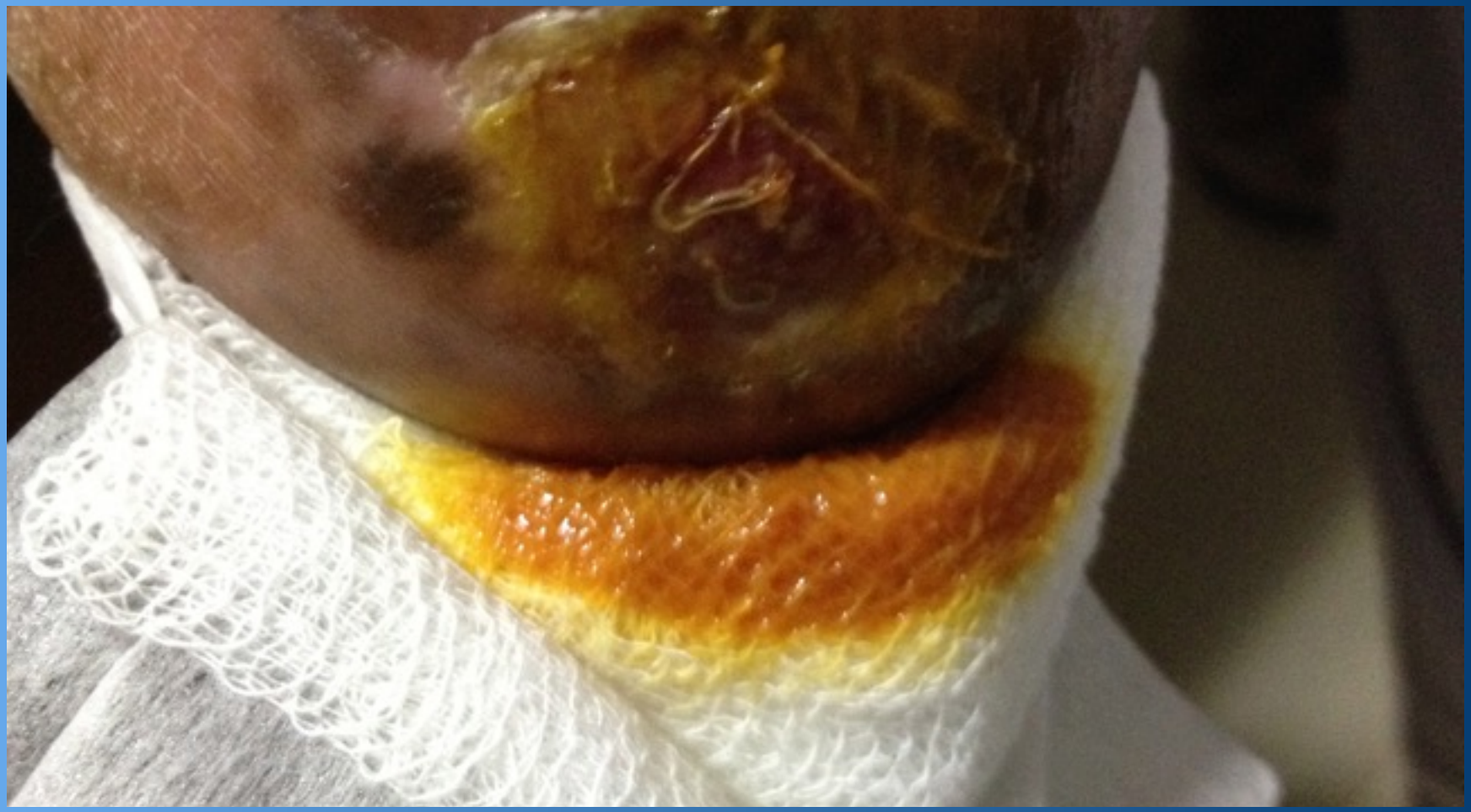


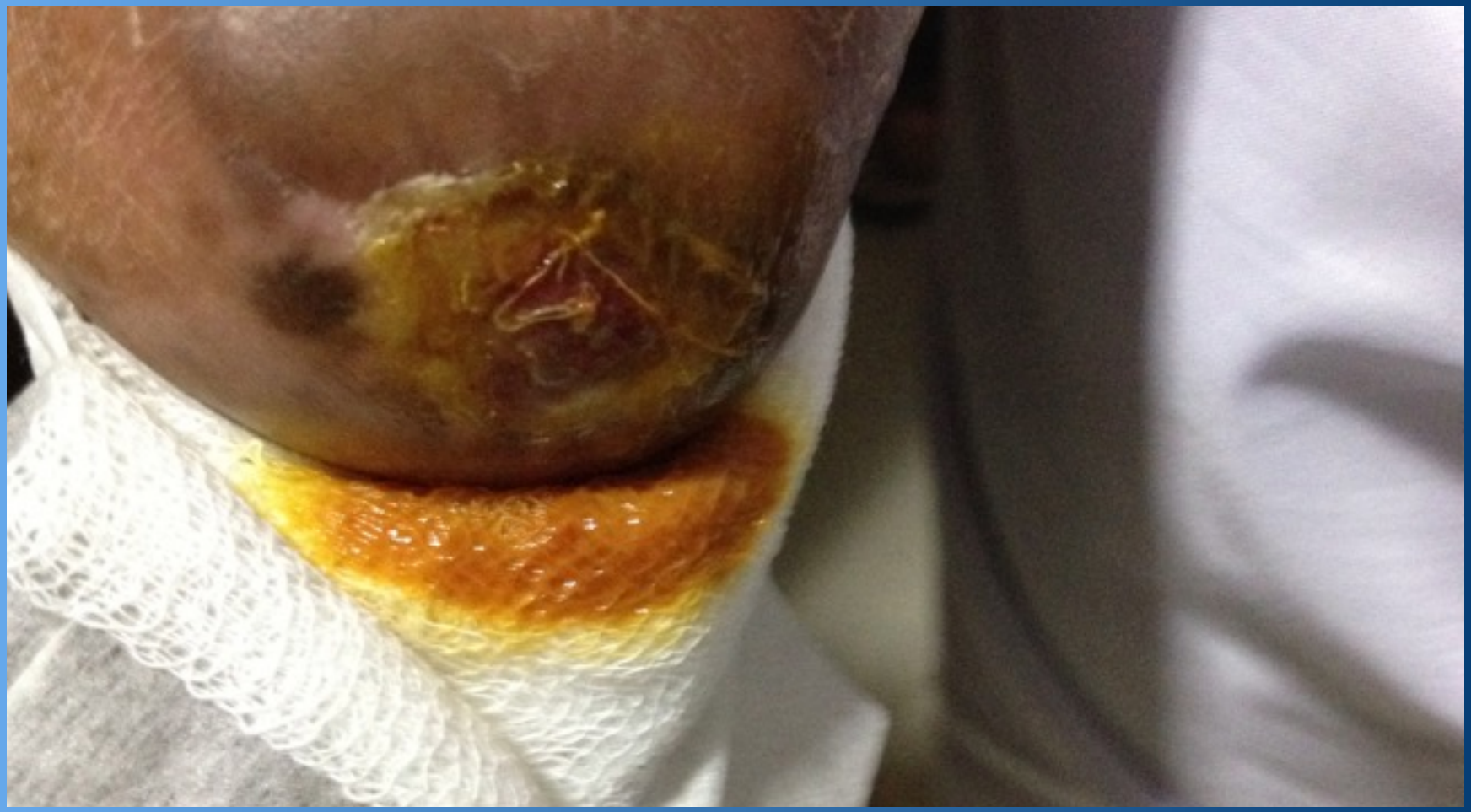
After 2 weeks



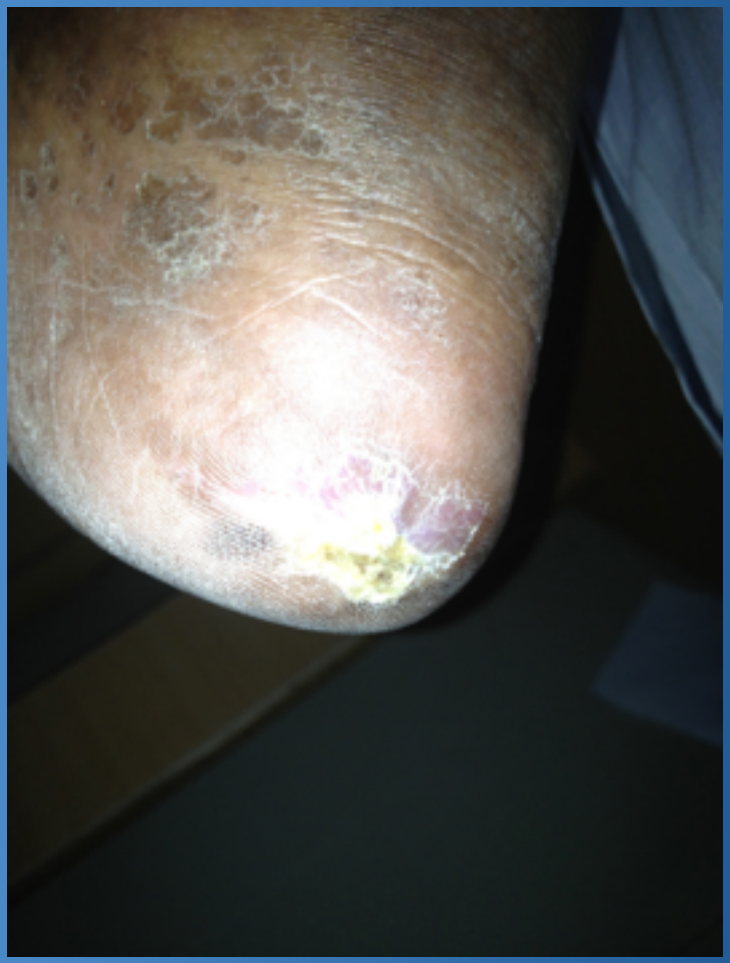


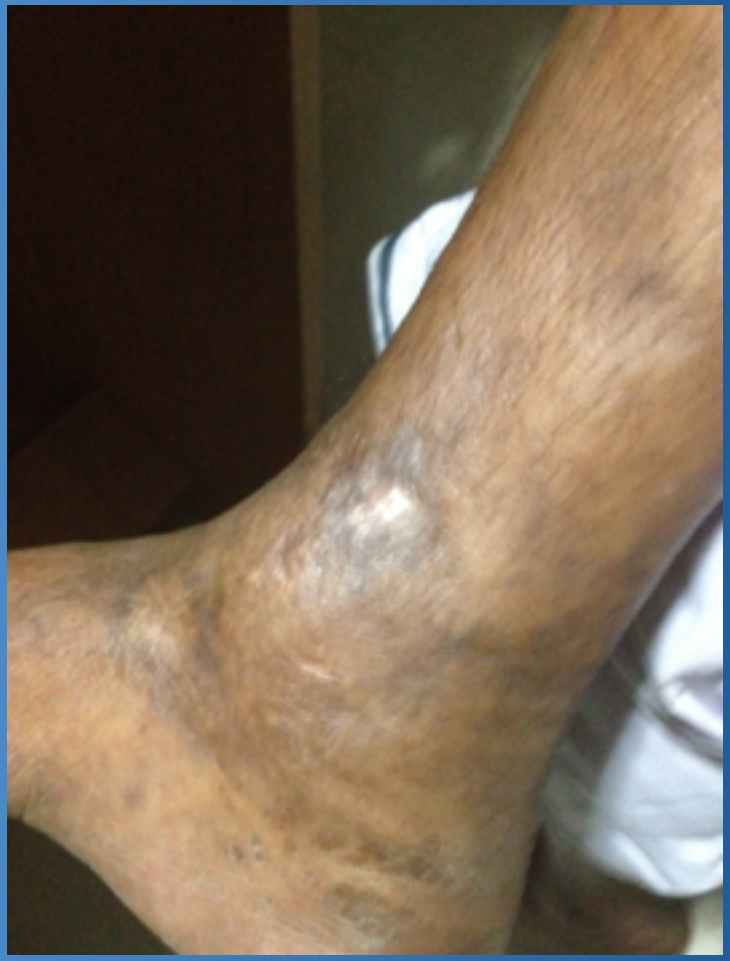
After 1 month





After 2 months





summary

- Even very long and impossible CTO may be amenable for percutaneous reconstruction
- Proper selection of hardware is the key to success
- Use of export catheter instead of more costly reentry devices like double lumen microcatheters, pioneer and outback highlighted

HIGHLIGHTS

- Highlights complete endovascular reconstruction of SFA CTO from its orgin to popliteal artery
- Use of microcatheter , reentry from false lumen to true lumen using careful penetration of intima using proper angled wire and long knuckled wire technique to negotiate CTO by sub intimal tracking are highlighted
- Use of hydrophilic coated small diameter OTW balloon for wire trcking also highlighted


Thank you