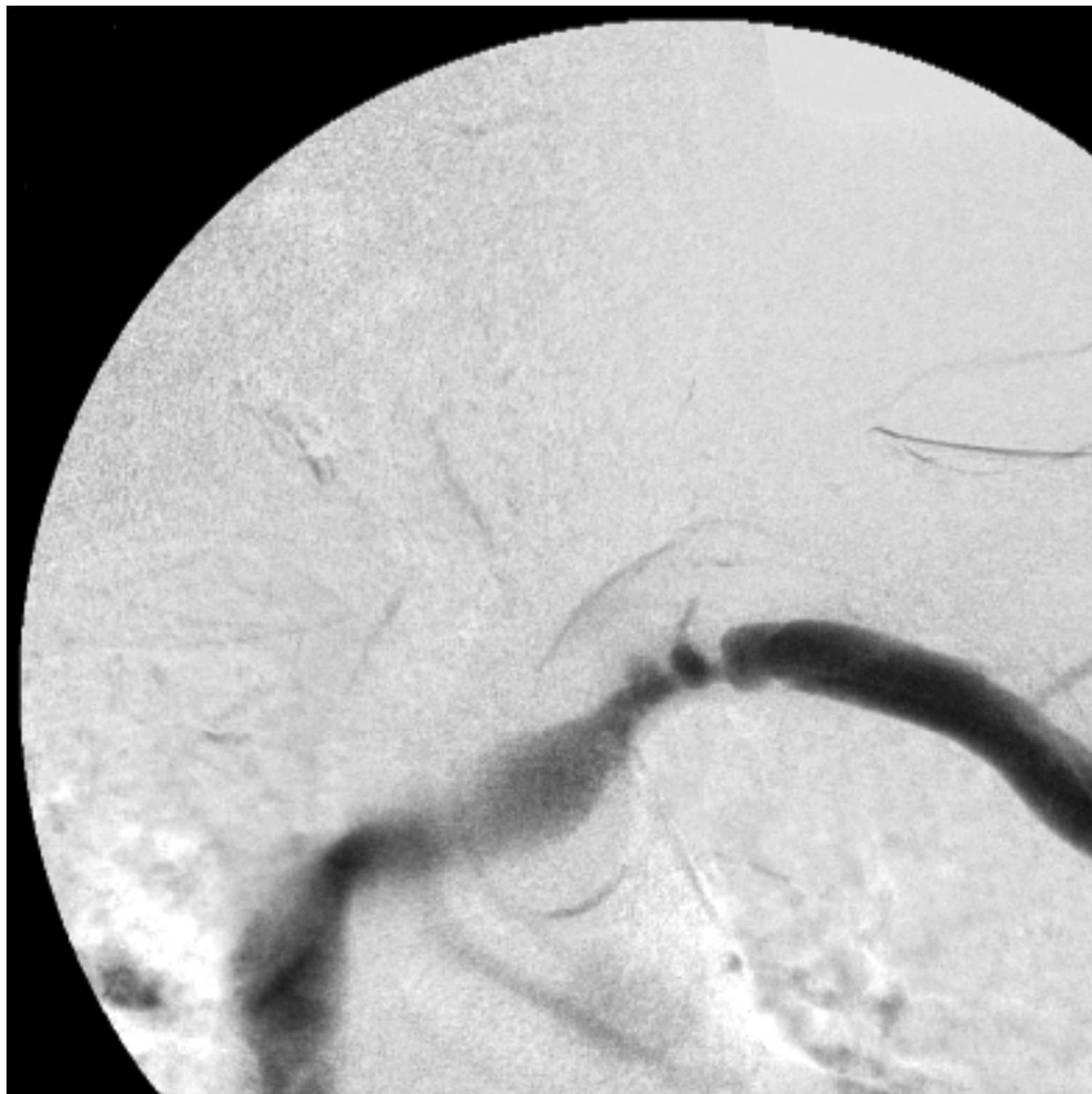
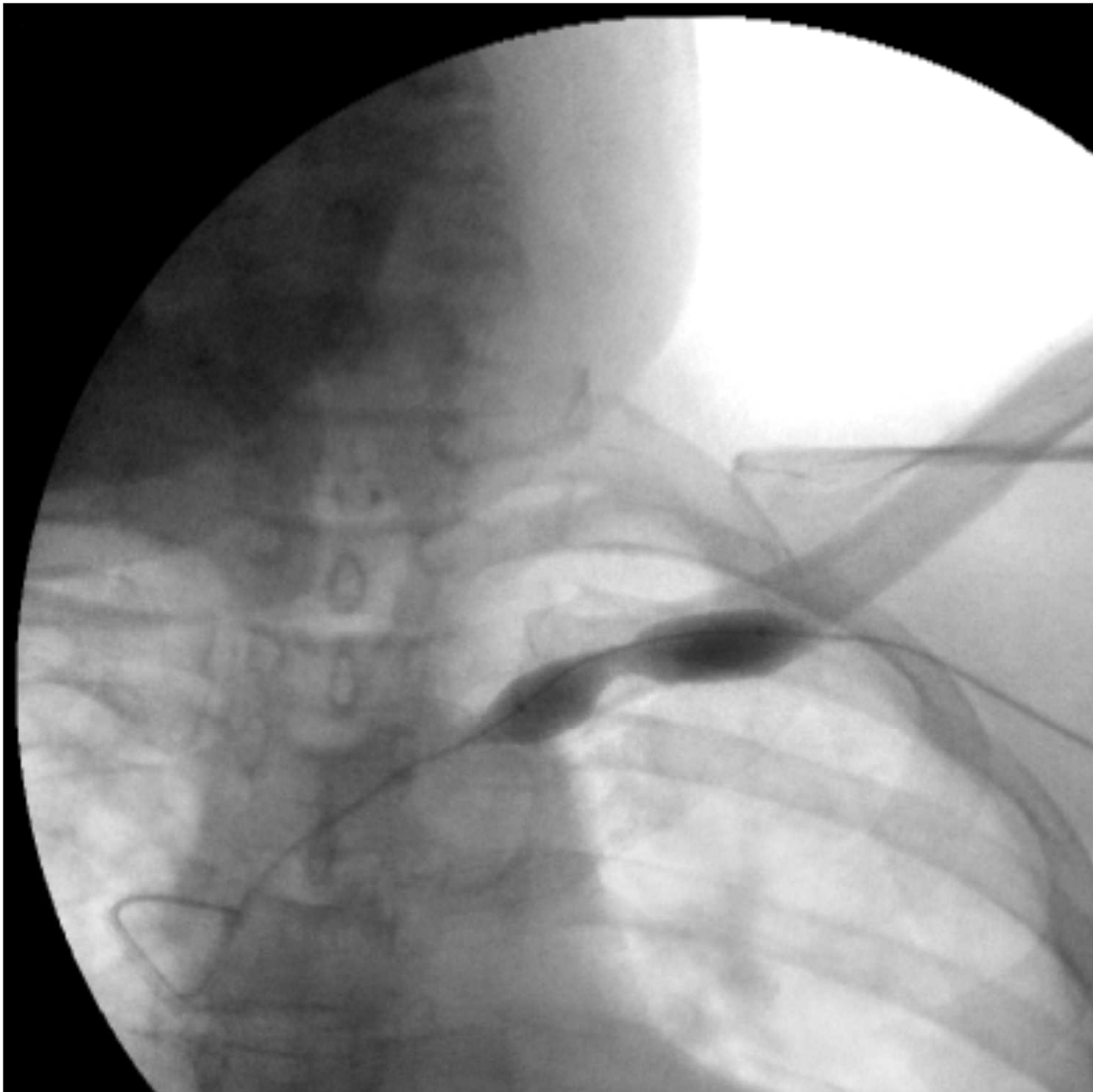


# Case 1

# History

- The patient is a 48-year-old male with a brachial-basilic AVF in left arm
- On dialysis for three years
- Four-week history of swollen arm ipsilateral to AVF









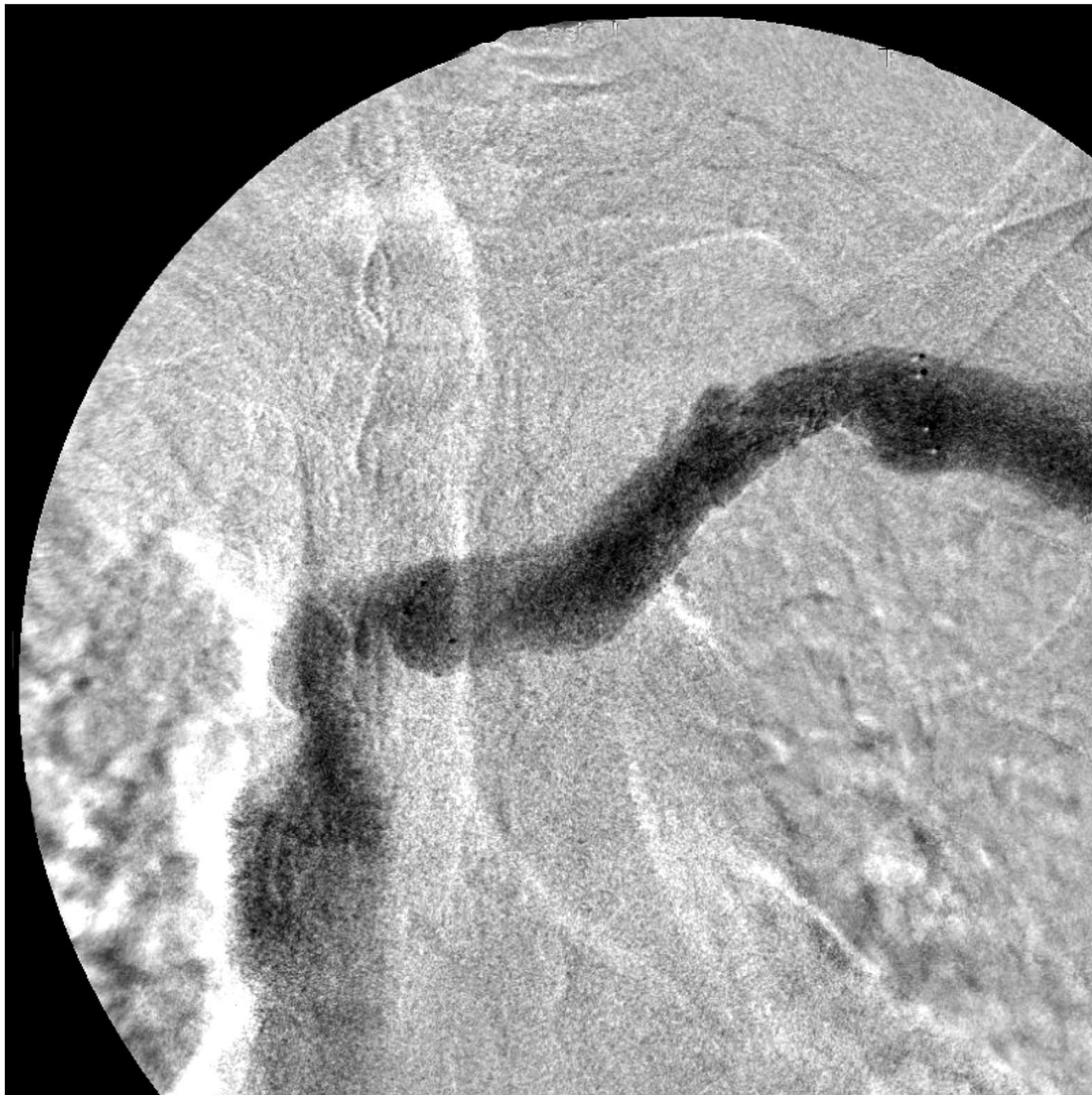
# Follow-up

- Swelling of arm resolved
- Four months post procedure, swelling of arm returned and was progressive

# Questions

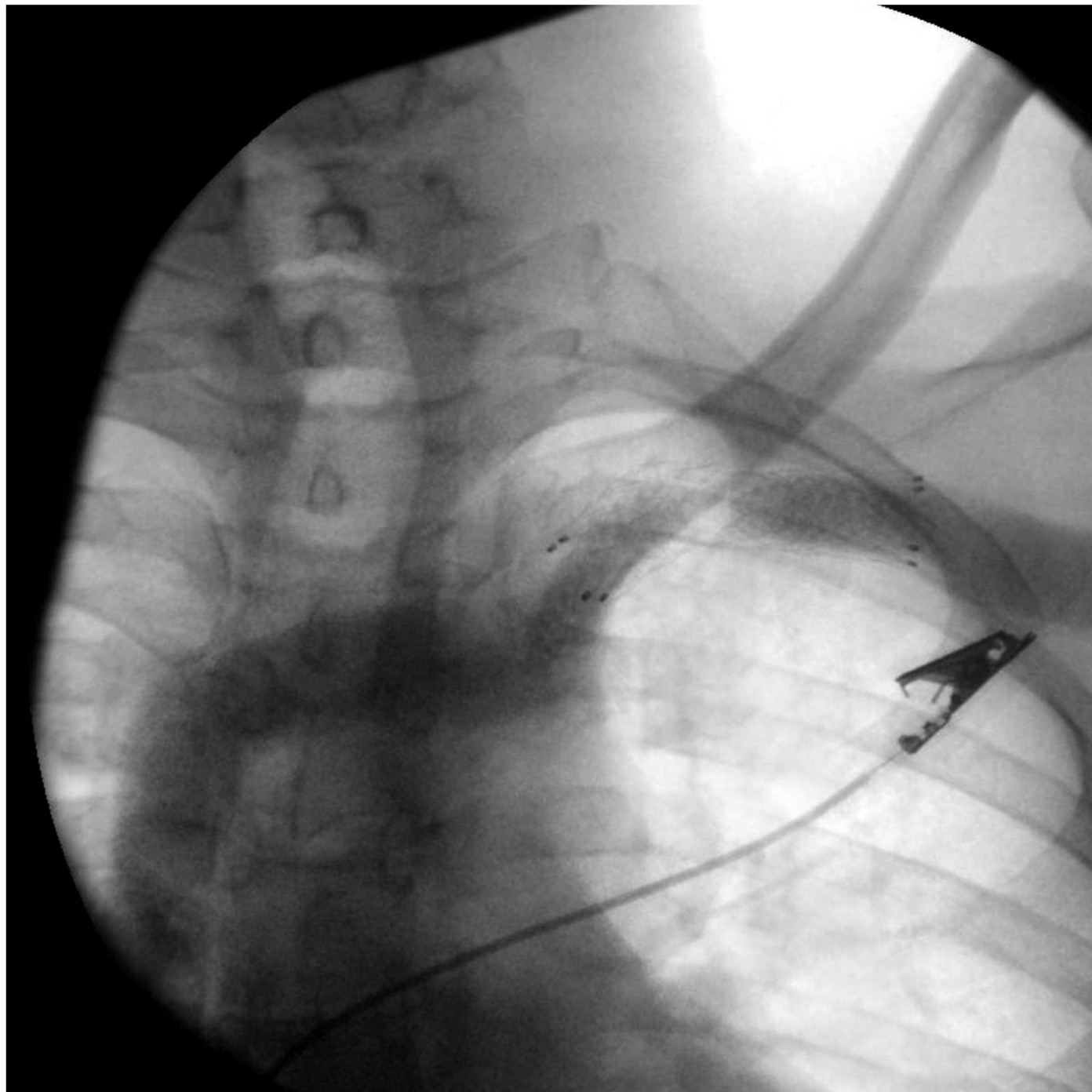
- Why have these symptoms recurred?
- Do you suspect that there is anything unusual happening in this case?

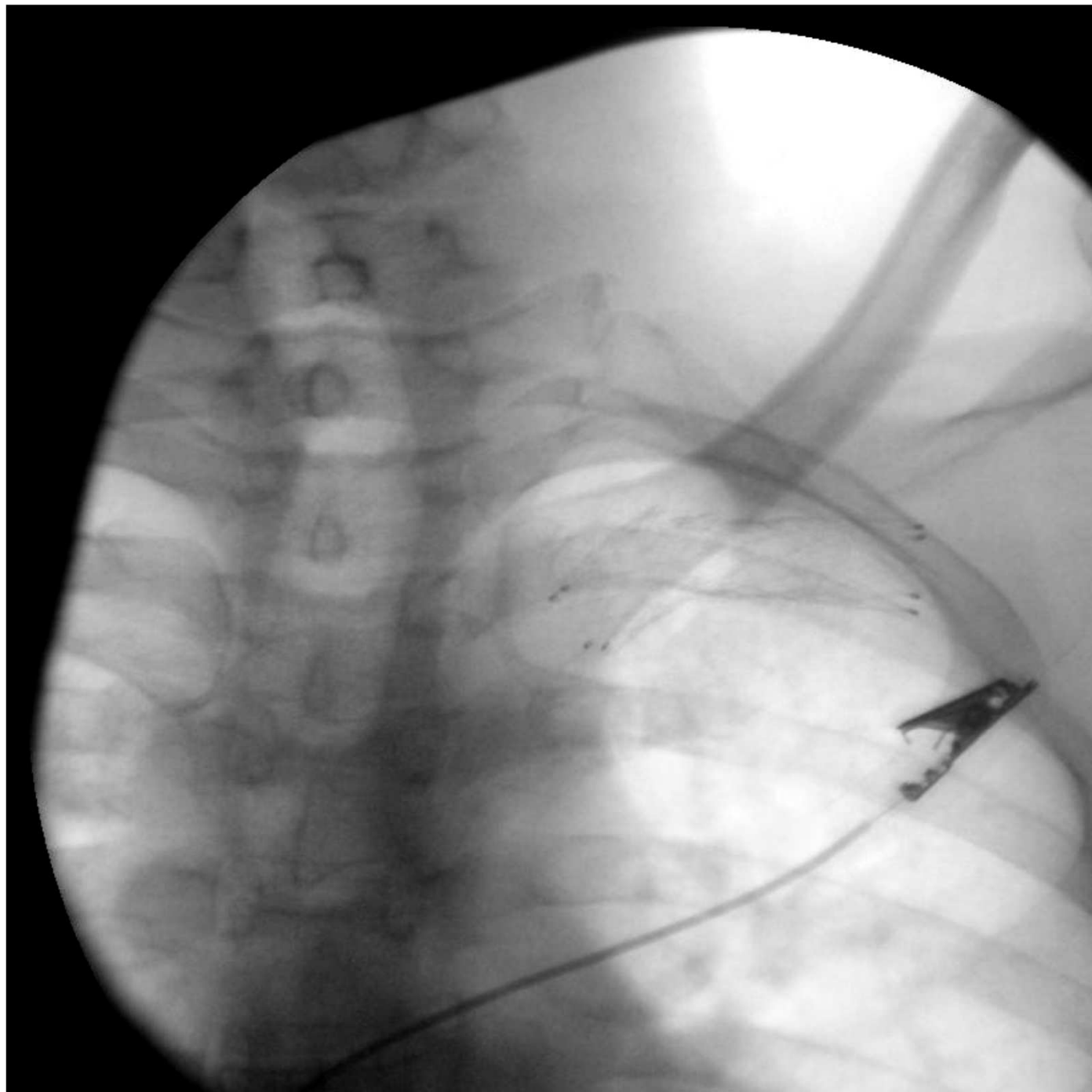




# Follow-up

- Swelling of arm resolved
- Three months post procedure swelling of arm returned







# Questions

- Do you anticipate further problems?
- Is there a more definitive treatment for this problem?

# Case 2

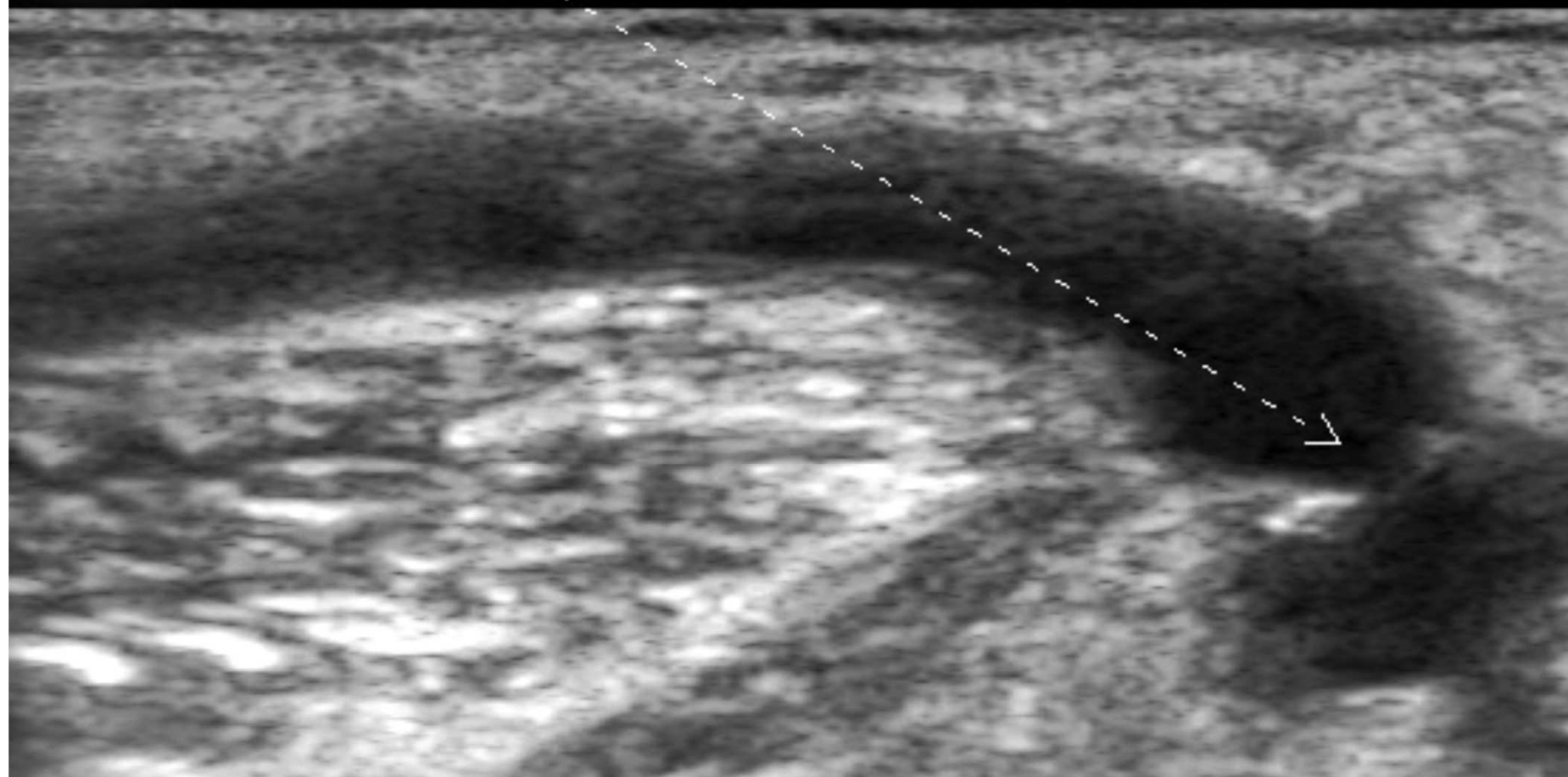
# History

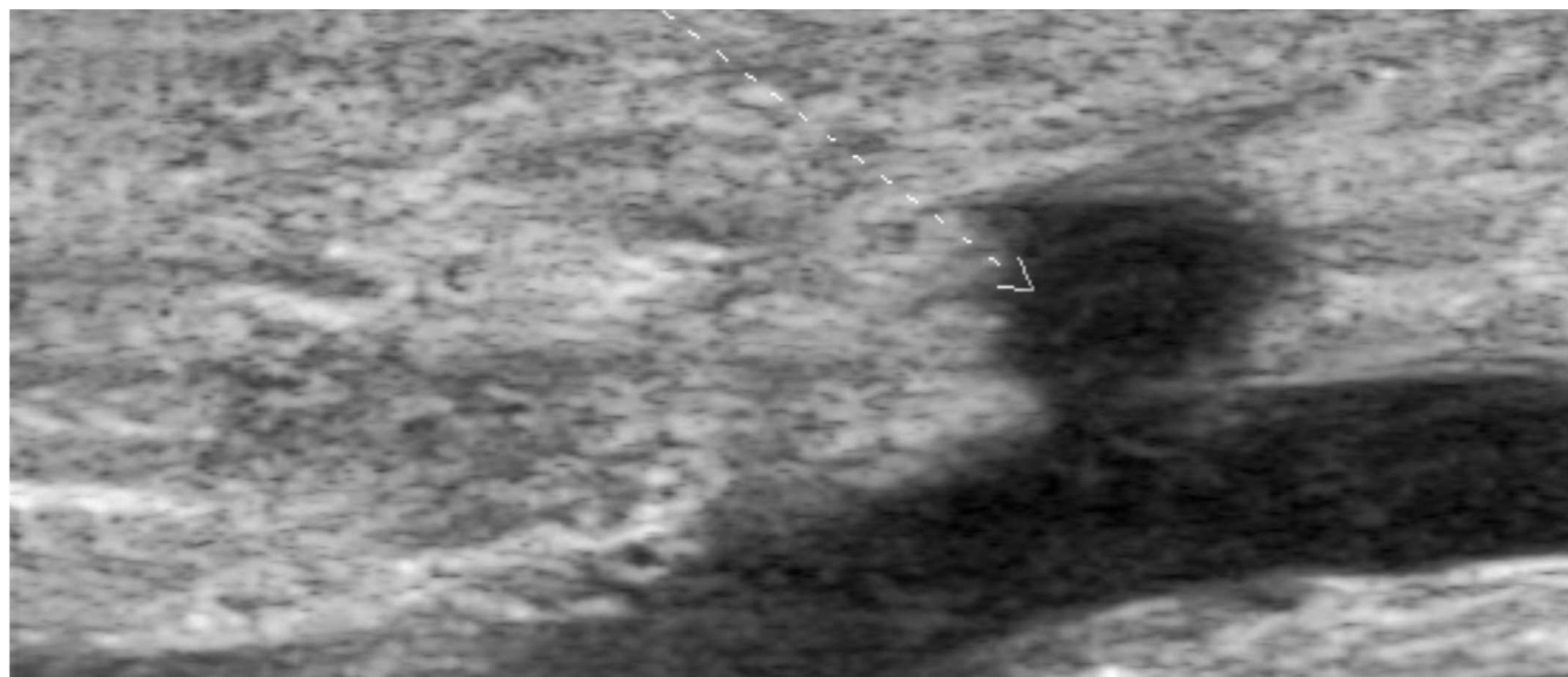
- 70-year-old female diabetic
- Three month old transposed brachial basilic AVF in right arm
- AVF has never been used, dialysis is via a left IJ catheter

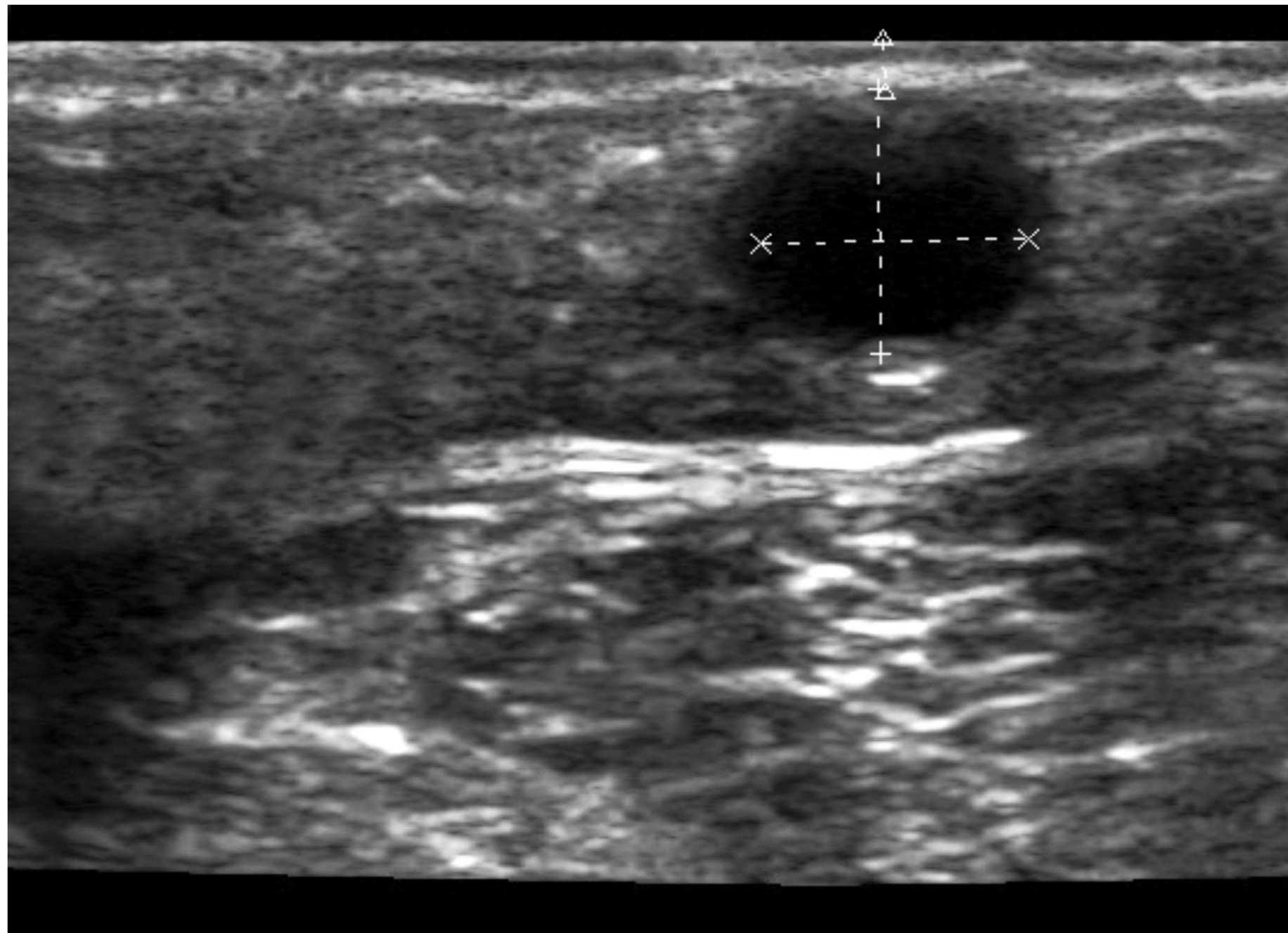
# Physical Examination

- Body of AVF adequate size
- AVF collapse with arm elevation
- Poor augmentation, 2/10
- Thrill and bruit at the anastomosis – systolic only

ANASTOMOSIS



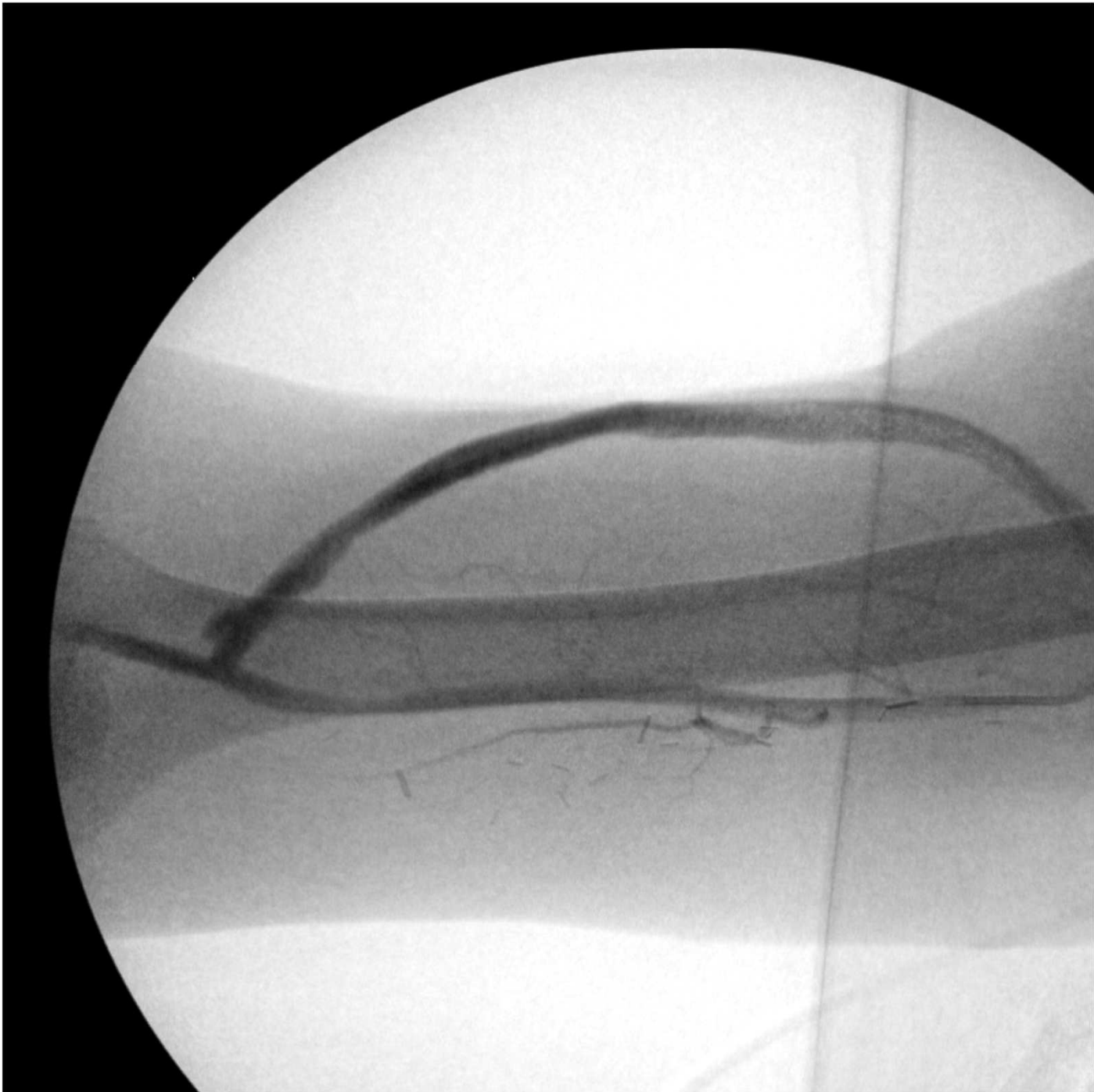














# Questions

- Would you treat this extravasation?
- If you elect to treat it, what treatment modality would you use?

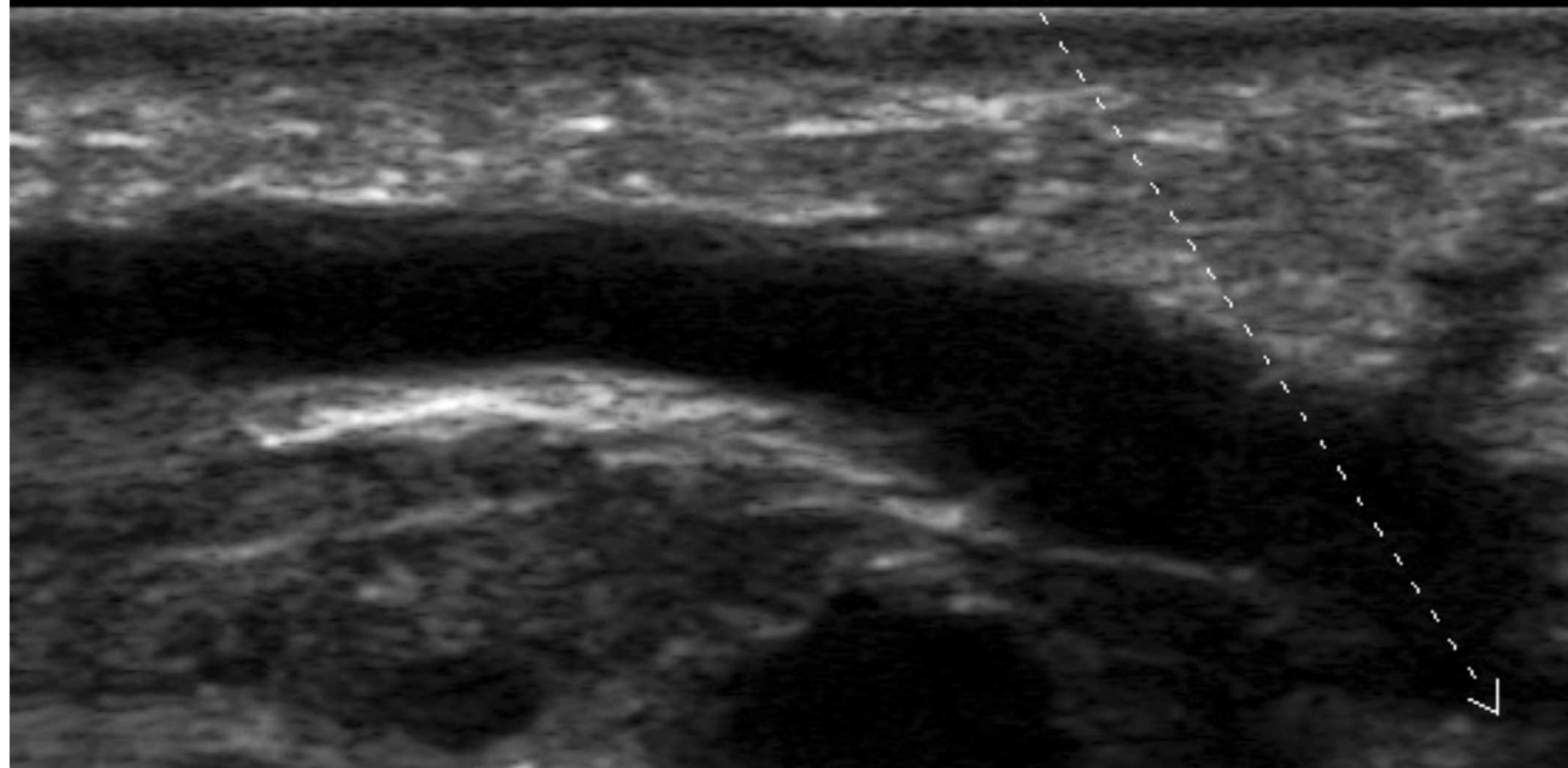
# Interval History

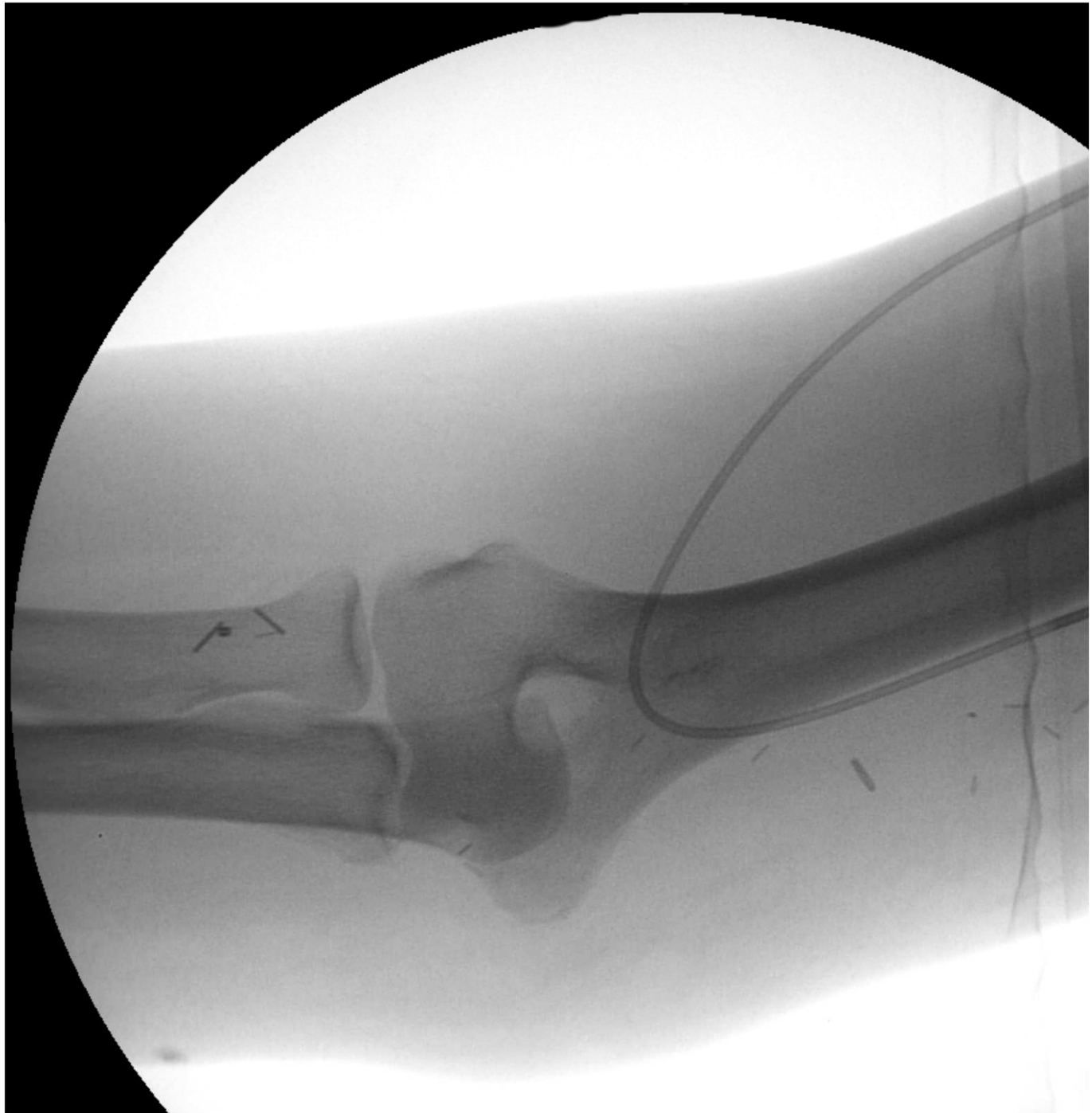
- The AVF was used for dialysis
- At the time of the third treatment with the AVF, the patient stated that she felt a “pop”
- This was followed by swelling and pain in the area of the anastomosis

# Physical Examination

- The antecubital region was ecchymotic and swollen
- The patient complained of only mild discomfort in this area
- The AVF collapsed with arm elevation
- Pulse augmentation was not evaluated
- Thrill and bruit were systolic and diastolic

ANASTOMOSIS





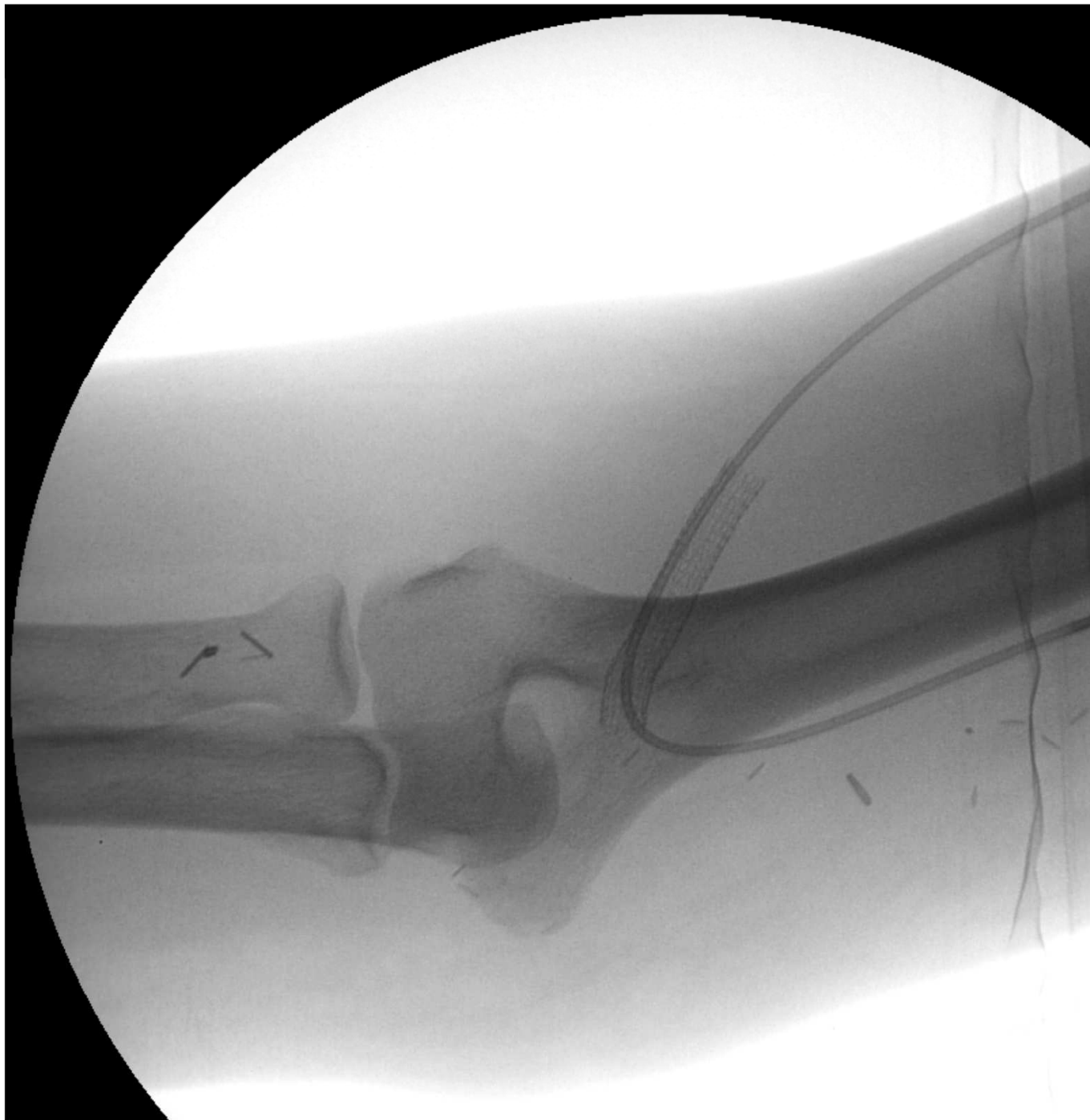




# Questions

- Would you treat this problem?
- What treatment modality would you use?

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# Interval History

- Patient return to access center for follow-up evaluation
- In the interval patient had a DRIL procedure for DASS
- AVF was being used without difficulty
- Physical examination was normal
- Ipsilateral hand looked good, no evidence of ischemia



# Questions

- In retrospect is there something that should have been done differently?
- Was there a reason to suspect that the patient was at risk for the development of DASS?
- Is there something that could have been done to prevent the development of DASS?



# Case 3

# History

- 54 year old female
- Dialysis for 1 year
- Had failed AVF
- Catheter dialysis for past 6 months
- Catheter dysfunction q 2weeks X 3





# Questions

- How would you manage this problem?
- Patient is catheter dependent, what would you do with the catheter?
- Should patient be placed on chronic anticoagulation?
- Is there a place for thrombolytic therapy in this type of case?

# Management

- Decision made to place catheter tip in IVC
- 36 cm catheter inserted over guidewire
- Patient was placed on chronic anticoagulation



# Case 4



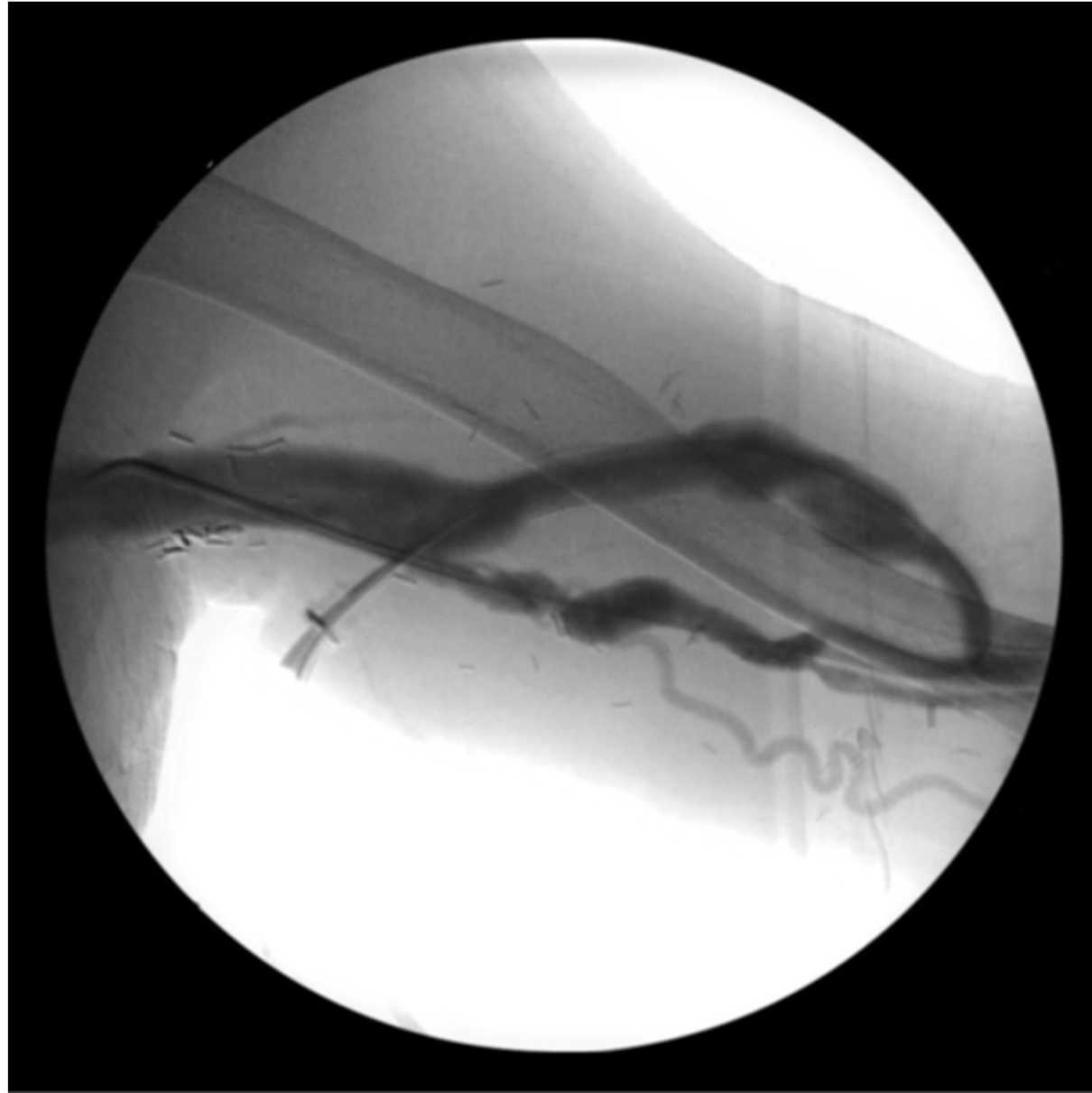
# History

- 35 y/o diabetic
- On dialysis for several years
- Left brachial-basilic AVF
- History of DASS
- Had DRIL procedure
- Has started having pain in hand on dialysis

# Physical Examination

- Left hand is cold in comparison to right
- No radial pulse at wrist with AVF open, no noticeable change with AVF occluded
- Weak radial Doppler at wrist with AVF open, no noticeable change with AVF occluded

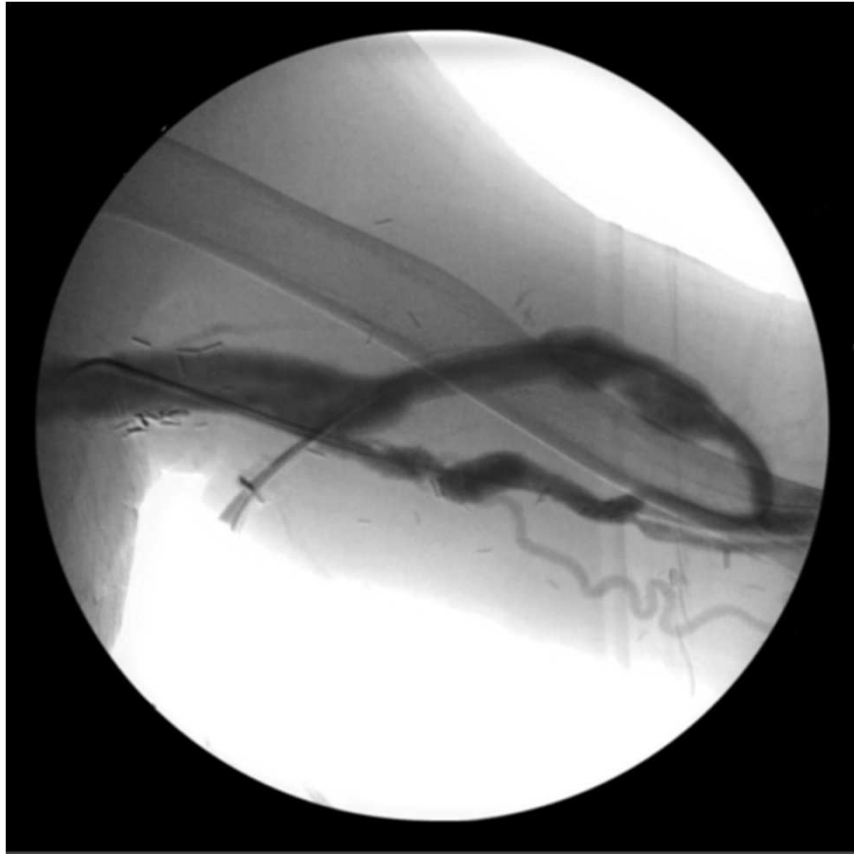
# Angiogram of Access



# Question

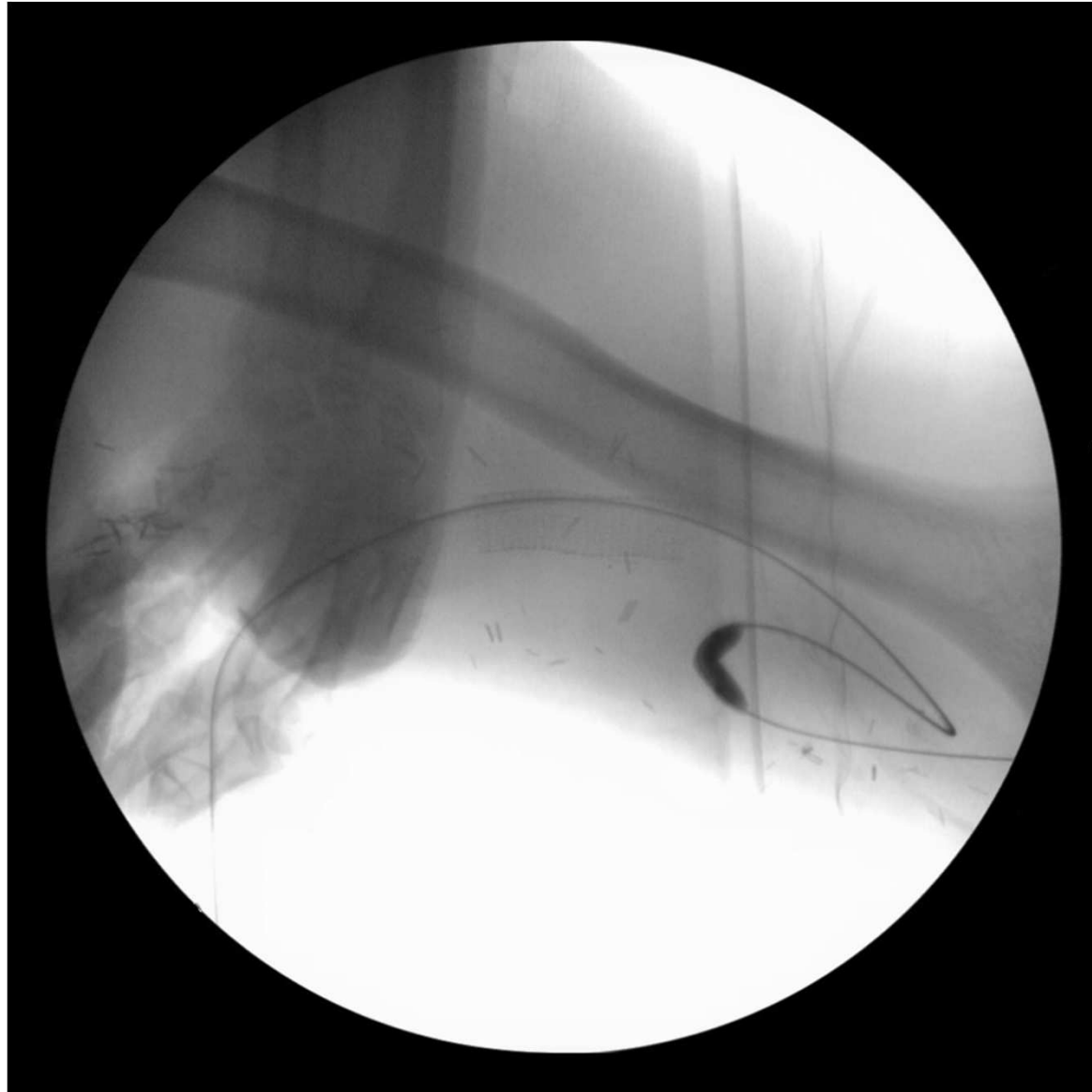
- What is most likely explanation for symptoms

# Angiogram of Access



No flow to lower arm through by-pass

By-pass anastomosis dilated with 6 X 4 angioplasty balloon



Good flow through by-pass graft after the PTA



# Diffuse arteriopathy of forearm arteries

# Comments

- Occlusion of the by-pass portion of the DRIL is a definite risk with this procedure
- For this reason many surgeons do only the DR portion of the DRIL , omitting the IL and the need for the by-pass
- Or do an alternative procedure

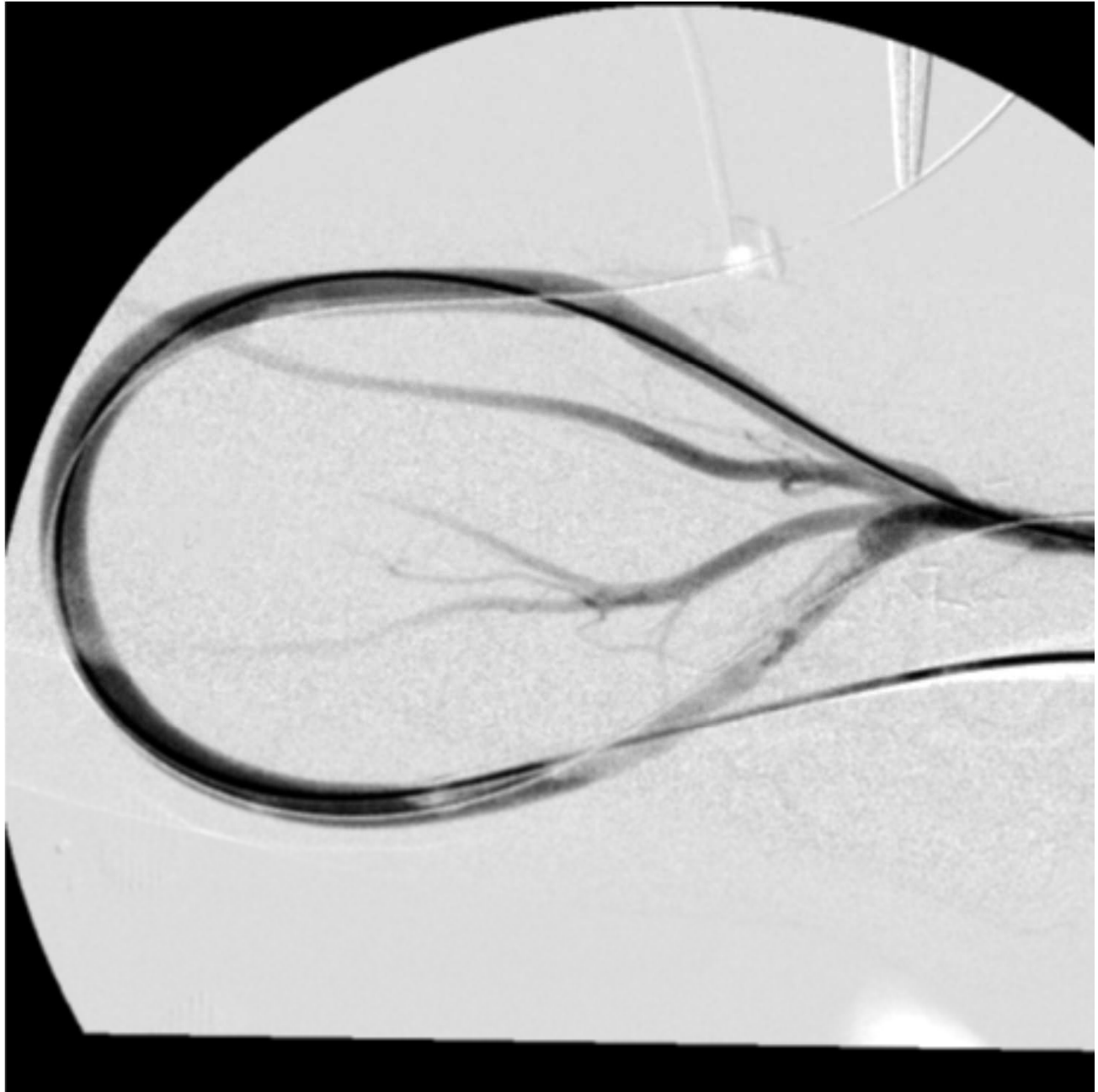
# Case 5

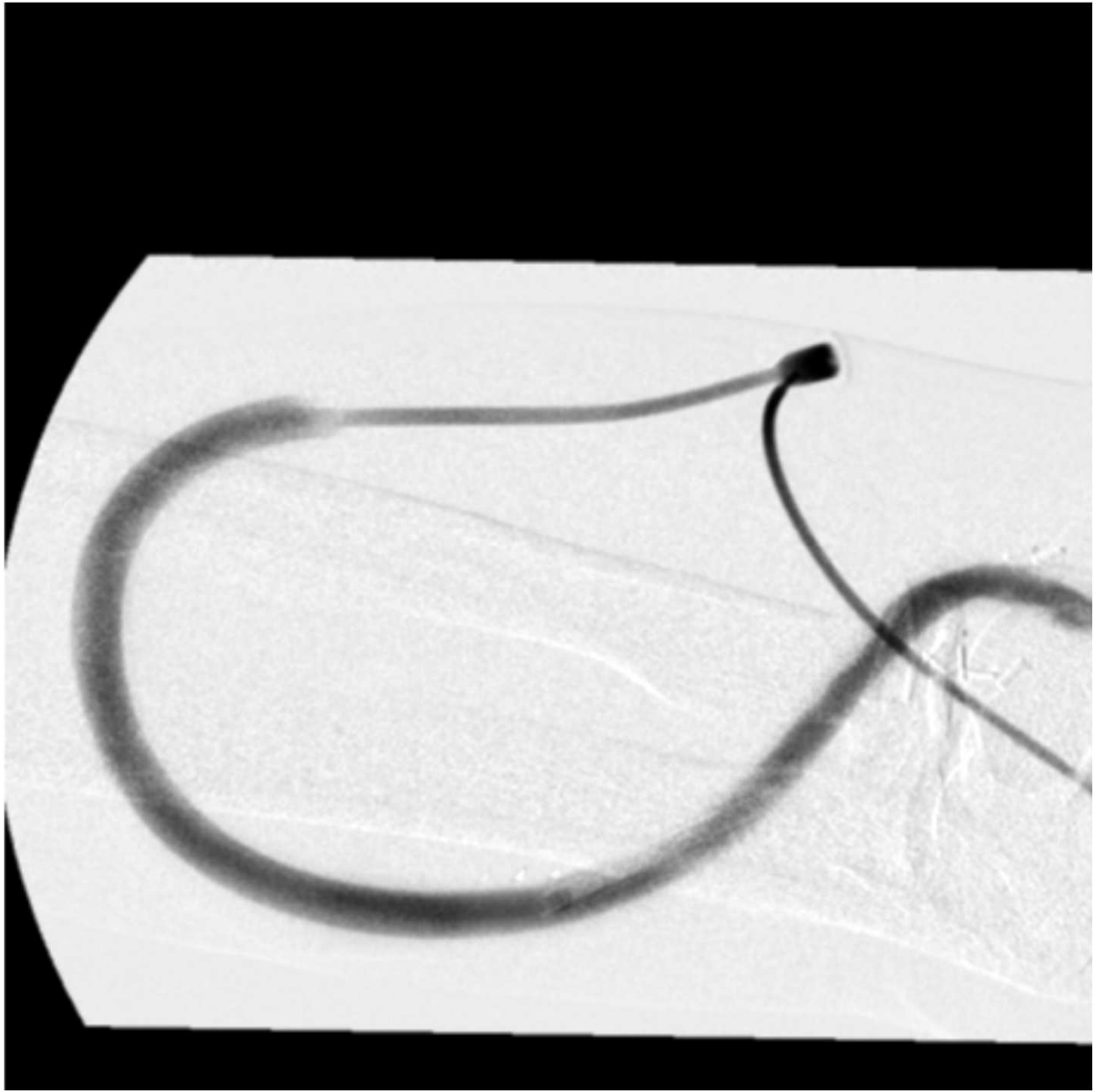
# History

- Patient is a 62-year-old male
- Left forearm loop graft
- Has had recurrent thrombosis – third episode in 8 weeks

# Physical Examination

- Left forearm loop graft
- No pulse, thrill or bruit



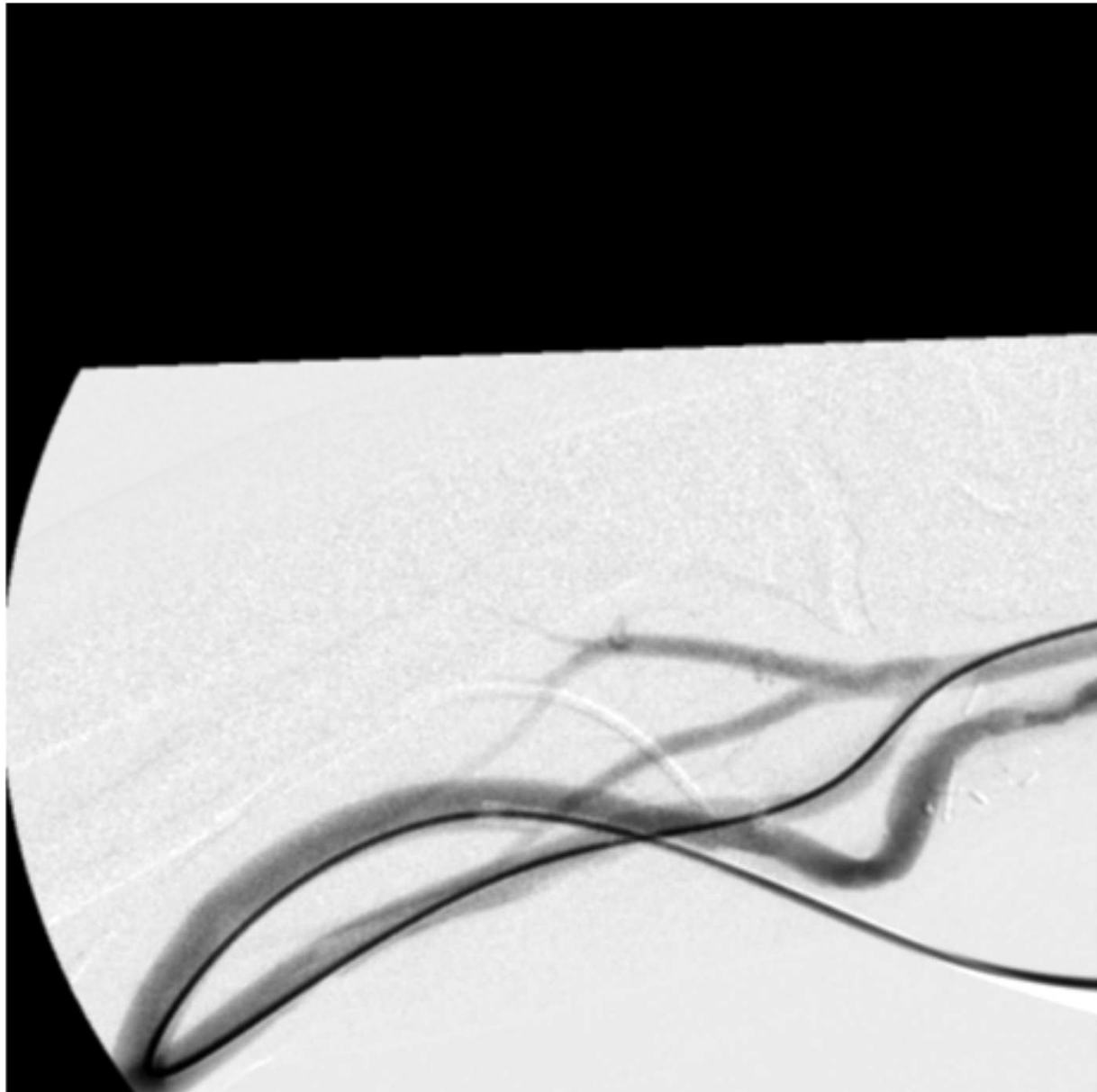


# Questions

- Are you concerned about the venous anastomosis?
- If you are concerned, what treatment modality would you use to address the issue?







# Questions

- Has your level of concern increased?
- If you are concerned, what treatment modality would you use to address the problem?



# Questions

- Are you pleased with the results?
- Do you have any concerns at this point?





# Questions

- What do you do now?
- Was there a better stent choice?



# Case 6

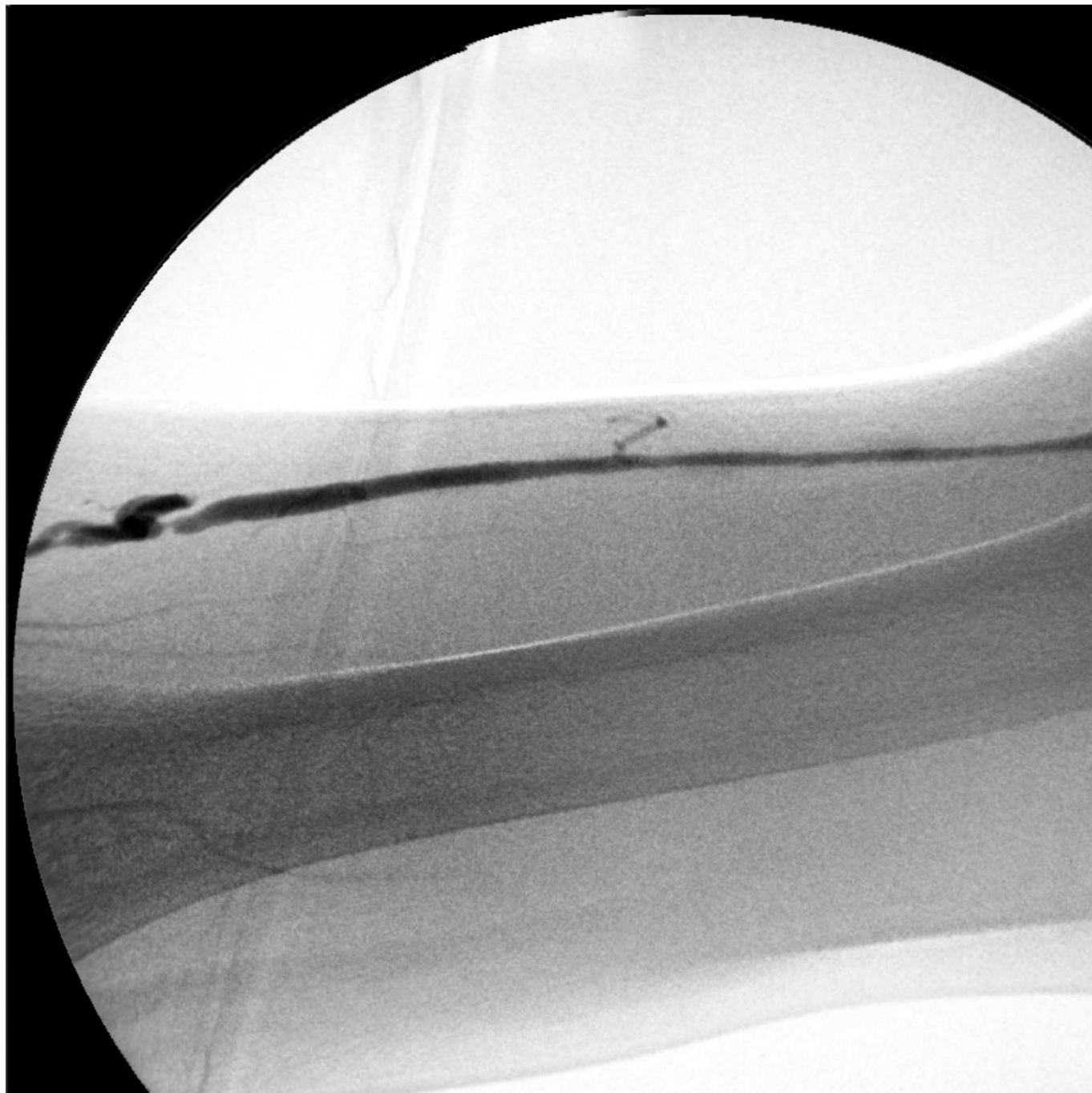
# History

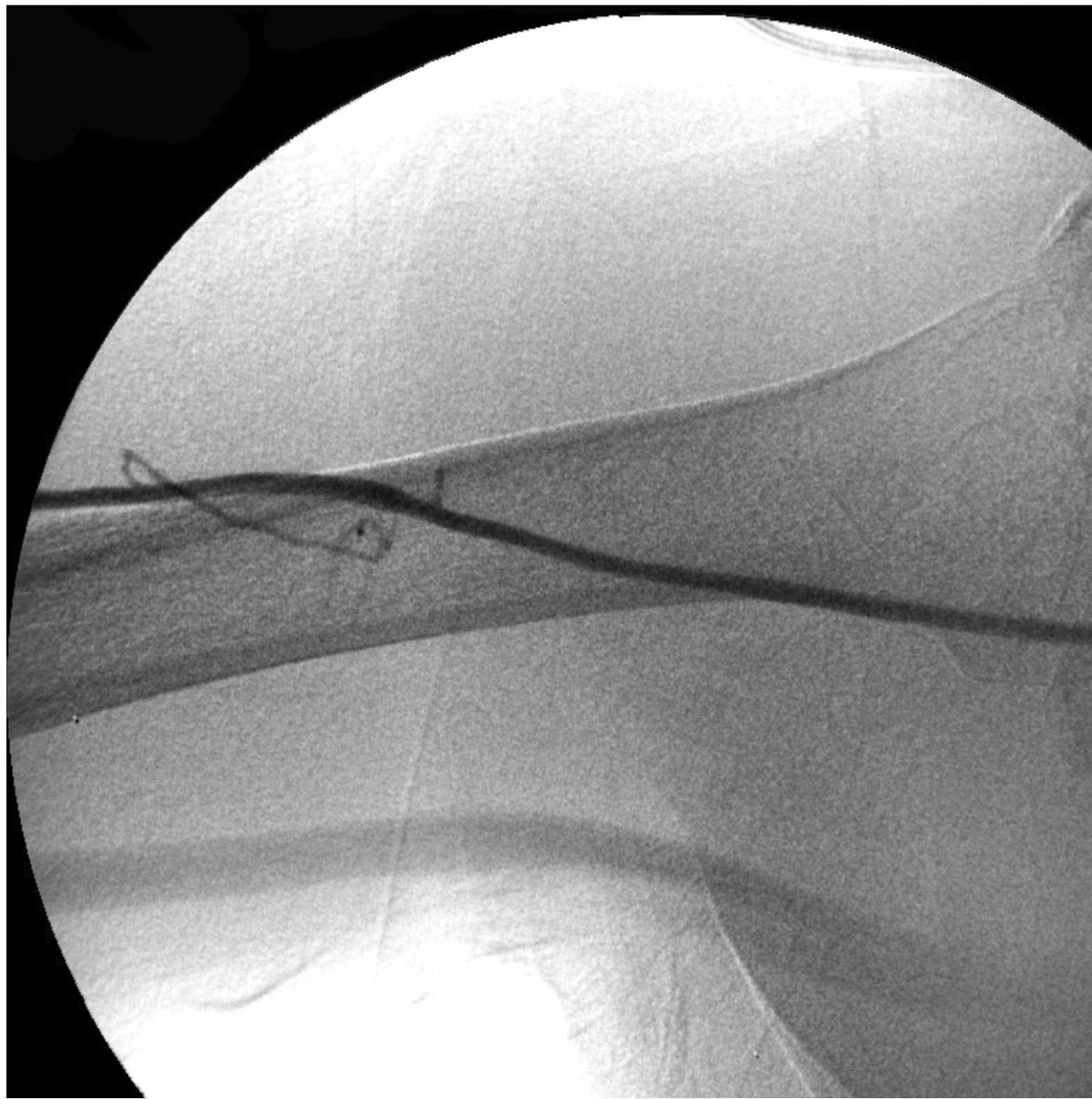
- 56-year-old male
- Right brachial-cephalic AVF
- AVF has been in place for six months but never used
- Patient is dialyzing with left IJ catheter

# Physical Examination

- Only approximately 6 cm of AVF immediately above anastomosis is palpable
- This area is moderately hyper- pulsatile
- It does not collapse with arm elevation
- Pulse augmentation is poor
- Bruit is systolic only









# Questions

- Is this AVF salvageable?

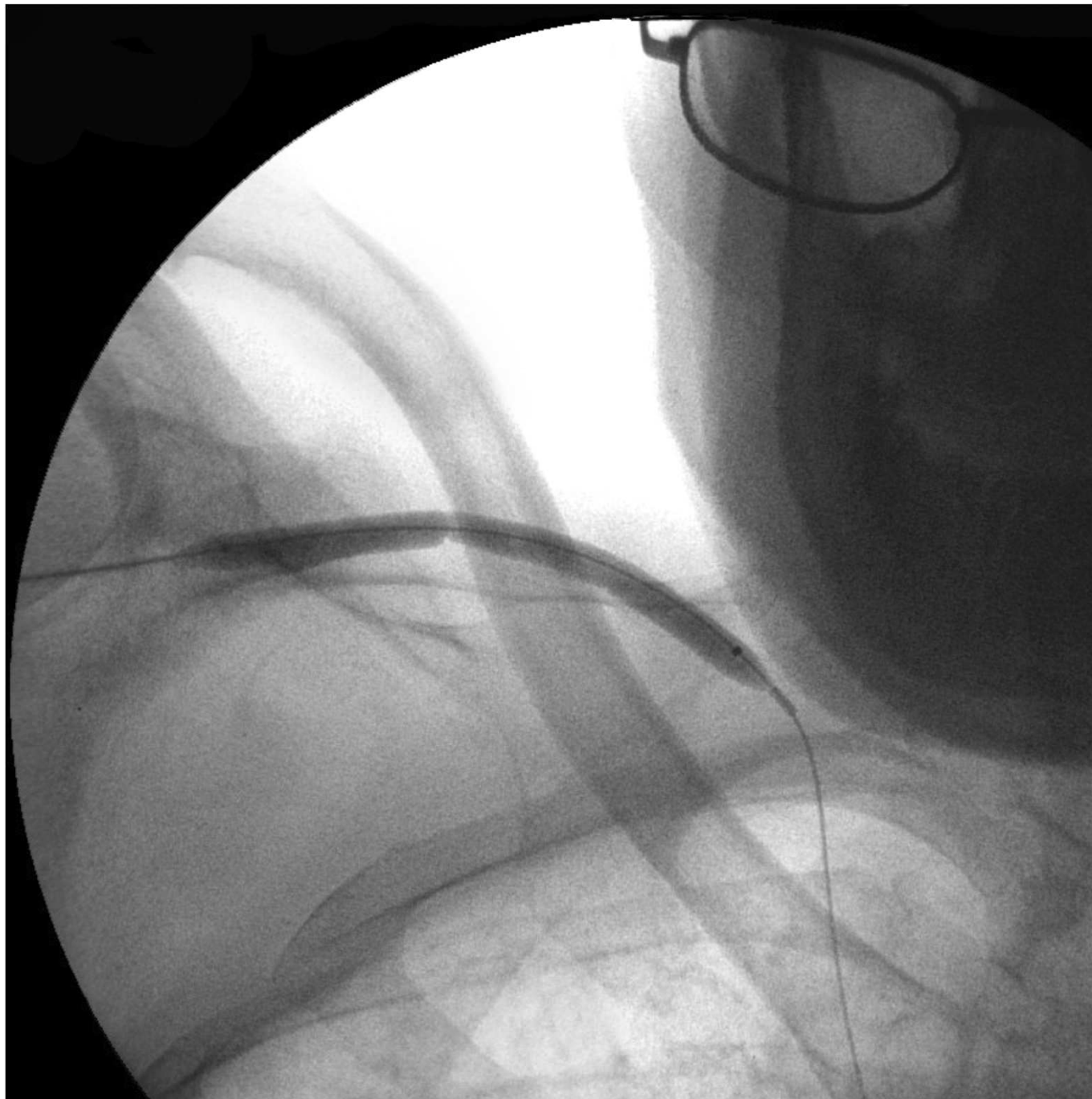














# Interval History

- The AVF has been used for three months
- Access blood flow was initially acceptable, but has been deteriorating in the last few weeks















# Question

- Is this AVF salvageable?















# Question

- What would you do at this point?