Severe Catheter Kinking and Entrapment During Transfemoral CTO PCI :

Percutaneous Retrieval Using a Snare from Contralateral Artery

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CASE DESCRIPTION

- Male, 65 yo with stable angina pectoris CCS III and prior inferior myocardial infarction at 2012. Risk factors : hypertension, dyslipidemia and smoker
- Medications : Aspirin 100 mg od, Simvastatin 20 mg od, Irbesartan 150 mg od.
- Physical examination : within normal limit

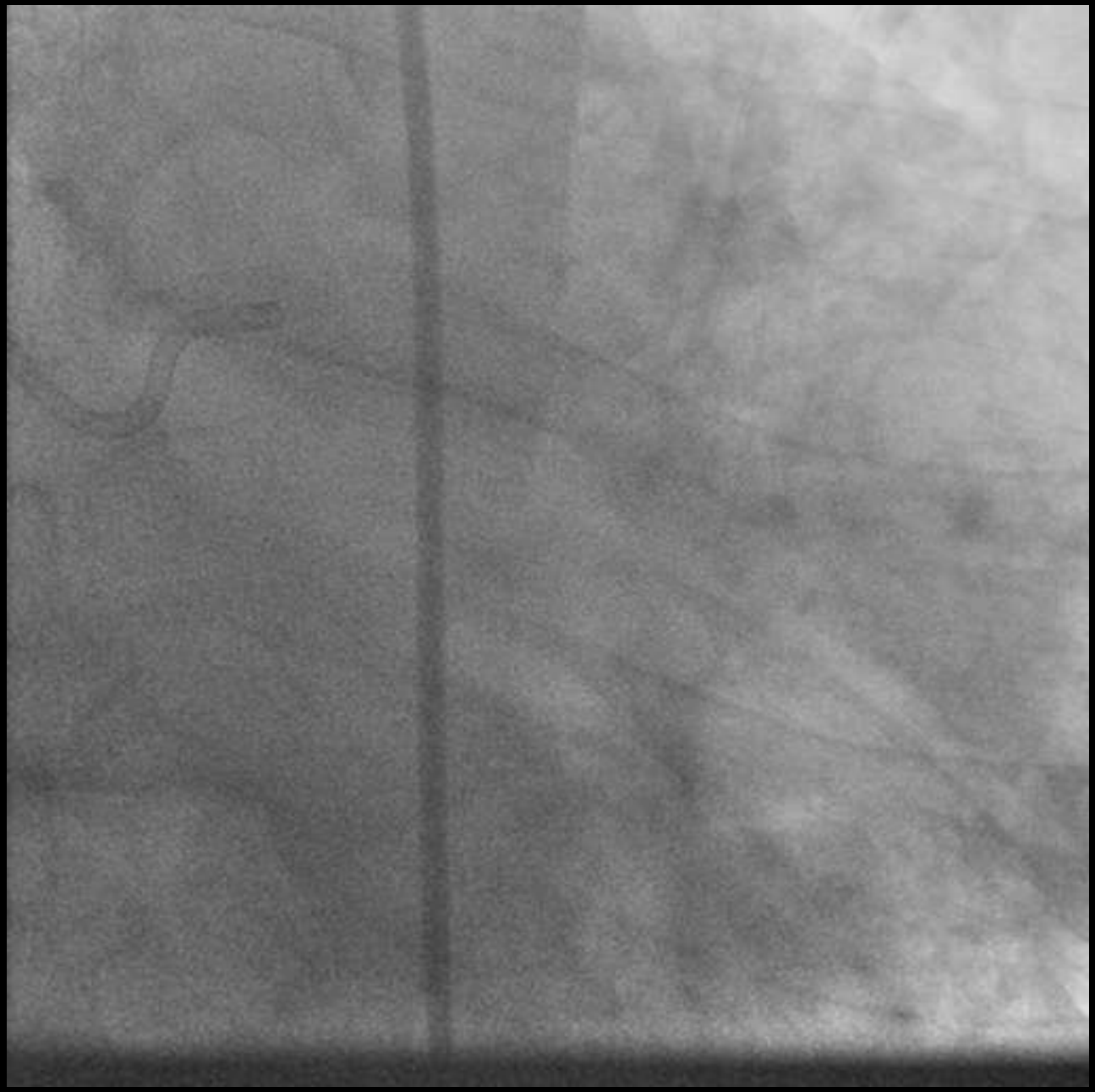
- ECG : Sinus rhythm, pathologic Q at II, III, aVF
- Echocardiography :

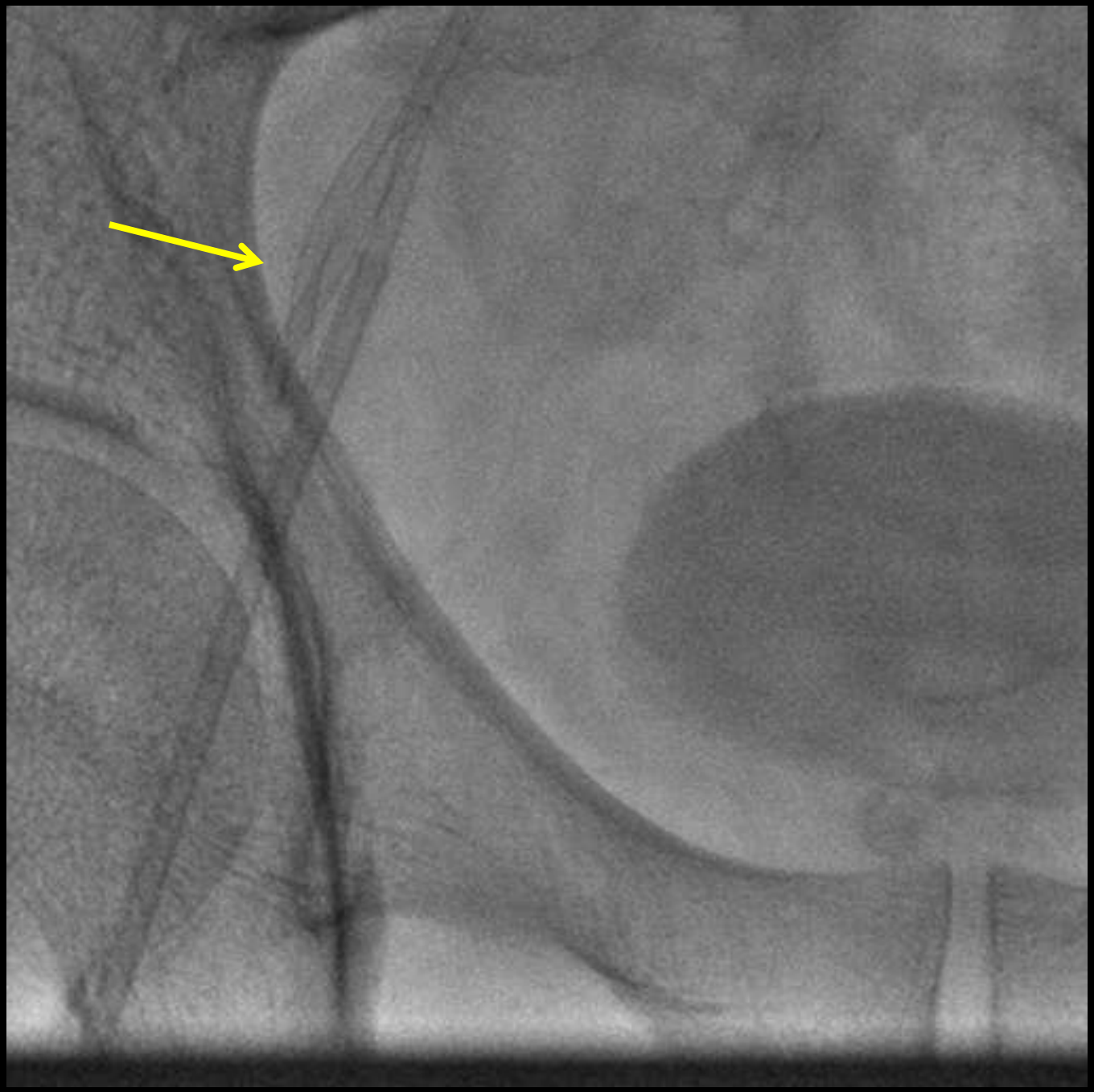
  Hypokinetic inferior segment with LVEF 52%
- Coronary angiogram :

  LM normal, LAD normal, LCx normal, RCA CTO at proximal part with bridging collateral
- Reffered for PCI to RCA CTO

Coronary Angiography

GC AL1 6Fr



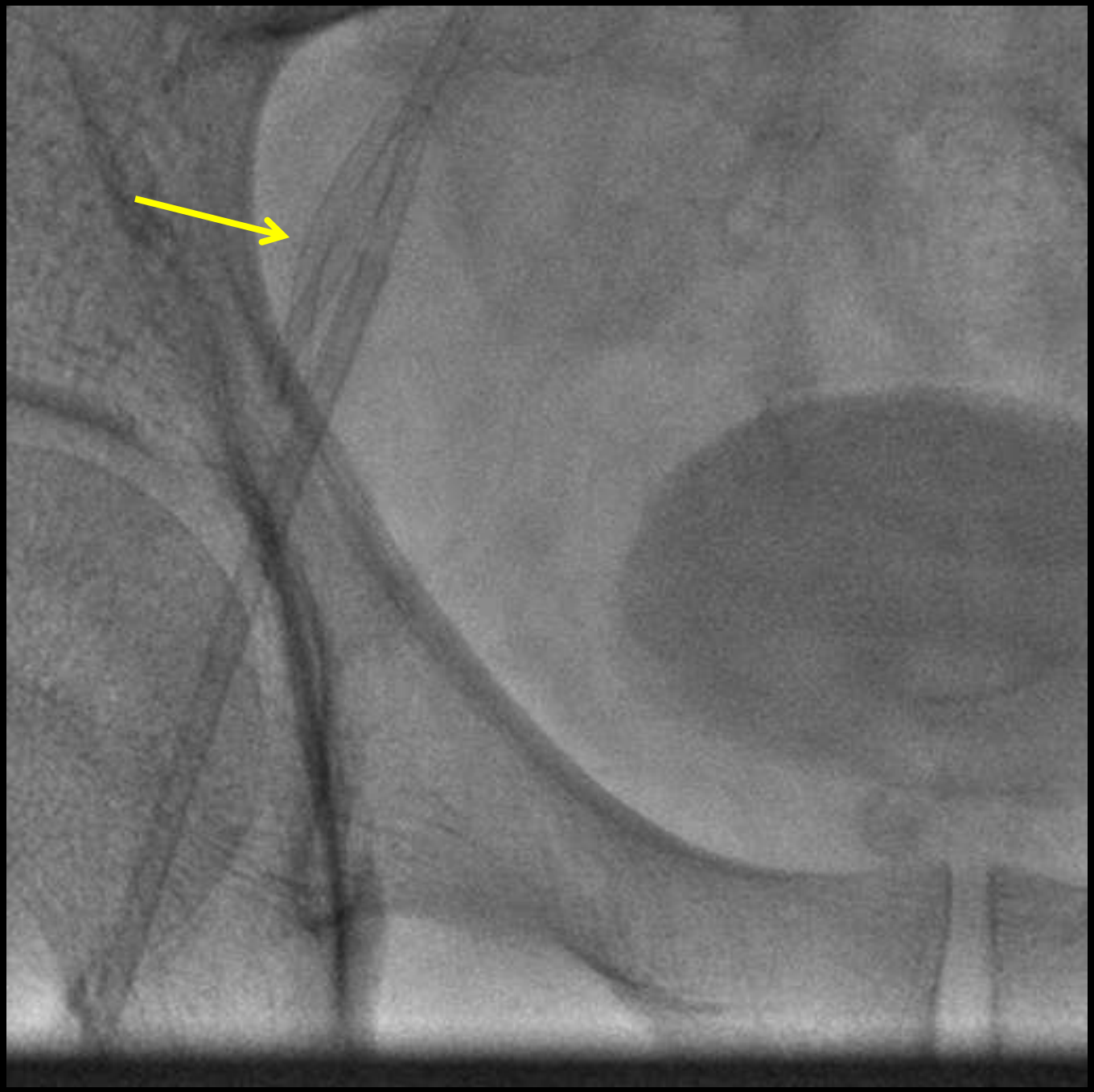


- The occurrence of minor kinking as a result of catheter manipulation is not uncommon. Usually, this can be managed conservatively by gentle opposite rotation and strightening of the catheter by crossing it with a regular or hydrophilic wire

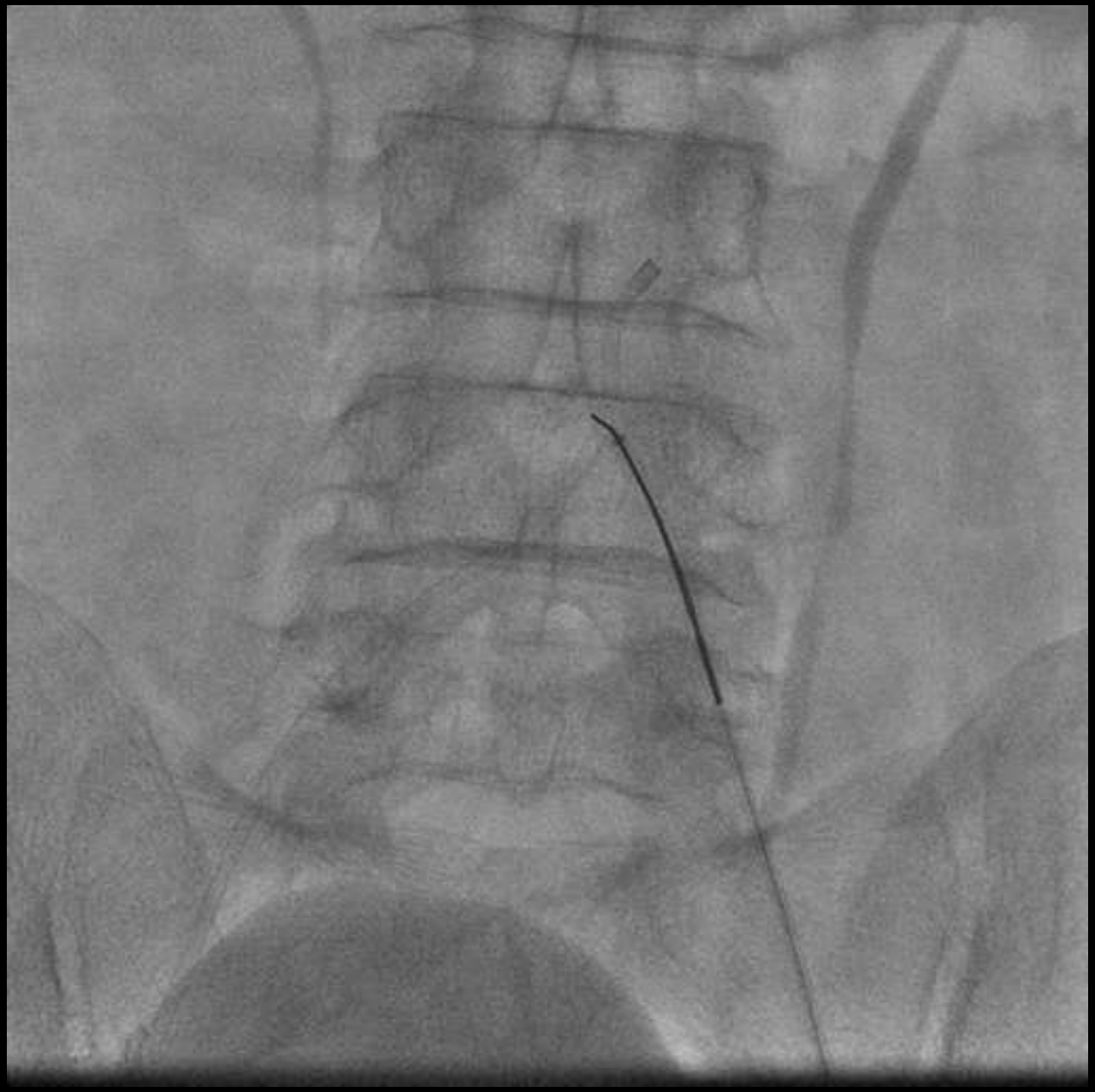
- Occasionally, as in our case, catheter deformation is more severe and results in vascular entrapment. This often requires an invasive approach for retrieval or emergency surgical intervention if percutaneous retrieval fails.

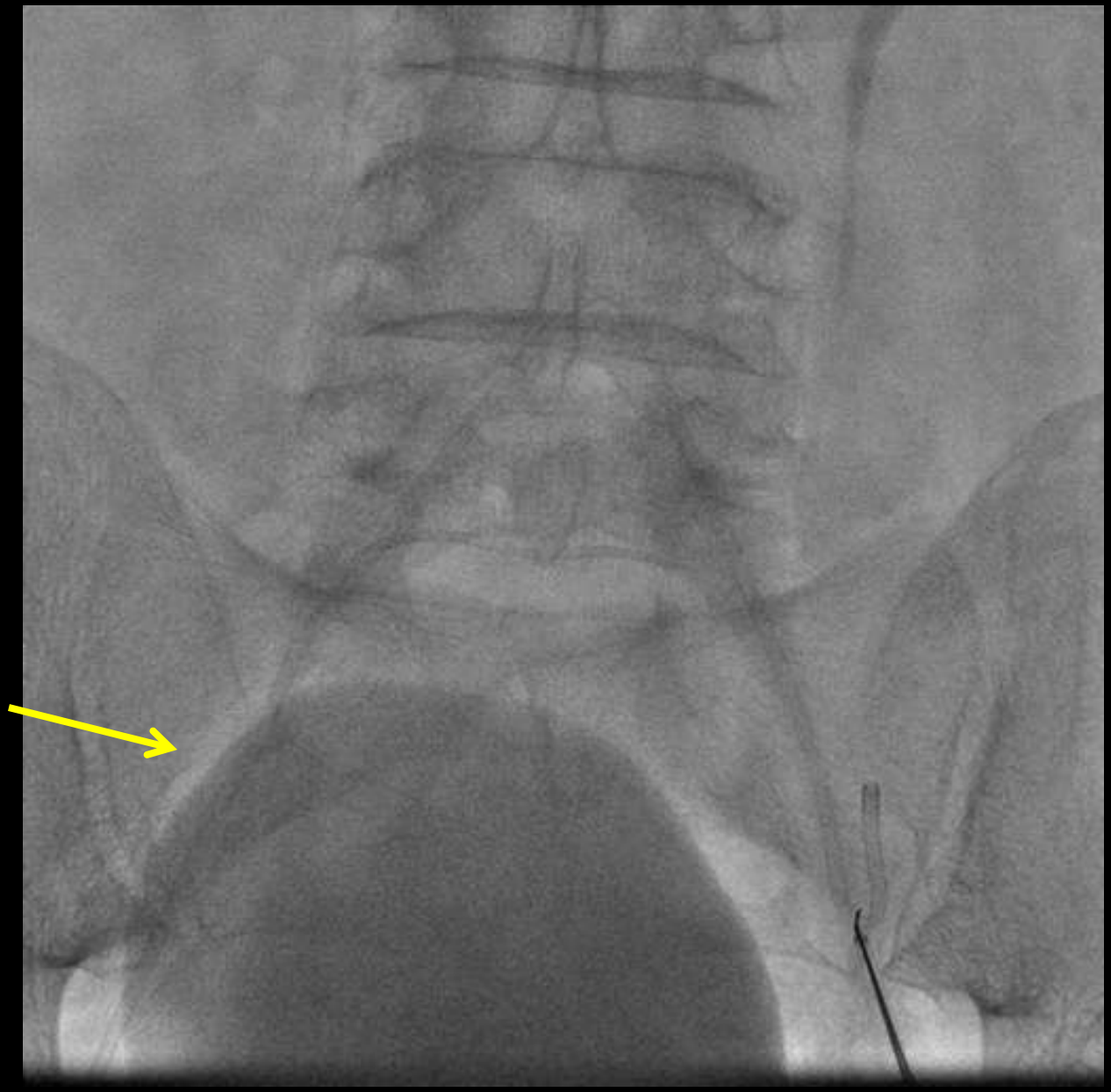
- Guide catheter kinking should be suspected when the arterial pressure waveform disappear or the catheter rotation at the hub is not transmitted to the guide catheter tip.

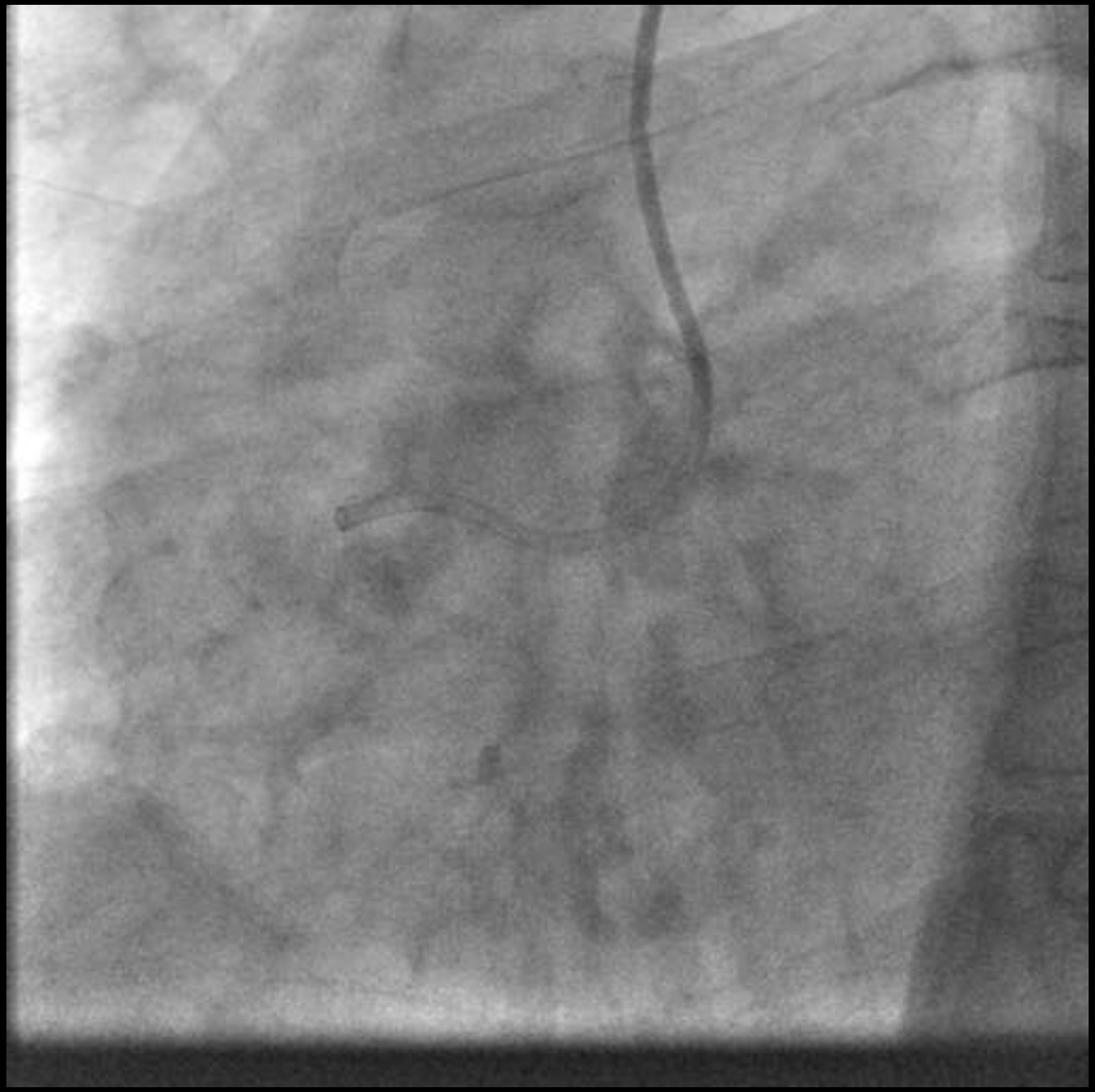
- Once the catheter kink is suspected, subsequent rotation of the catheter should be minimized and fluoroscopy along the catheter to pelvis and groin is needed to localize and treat it.

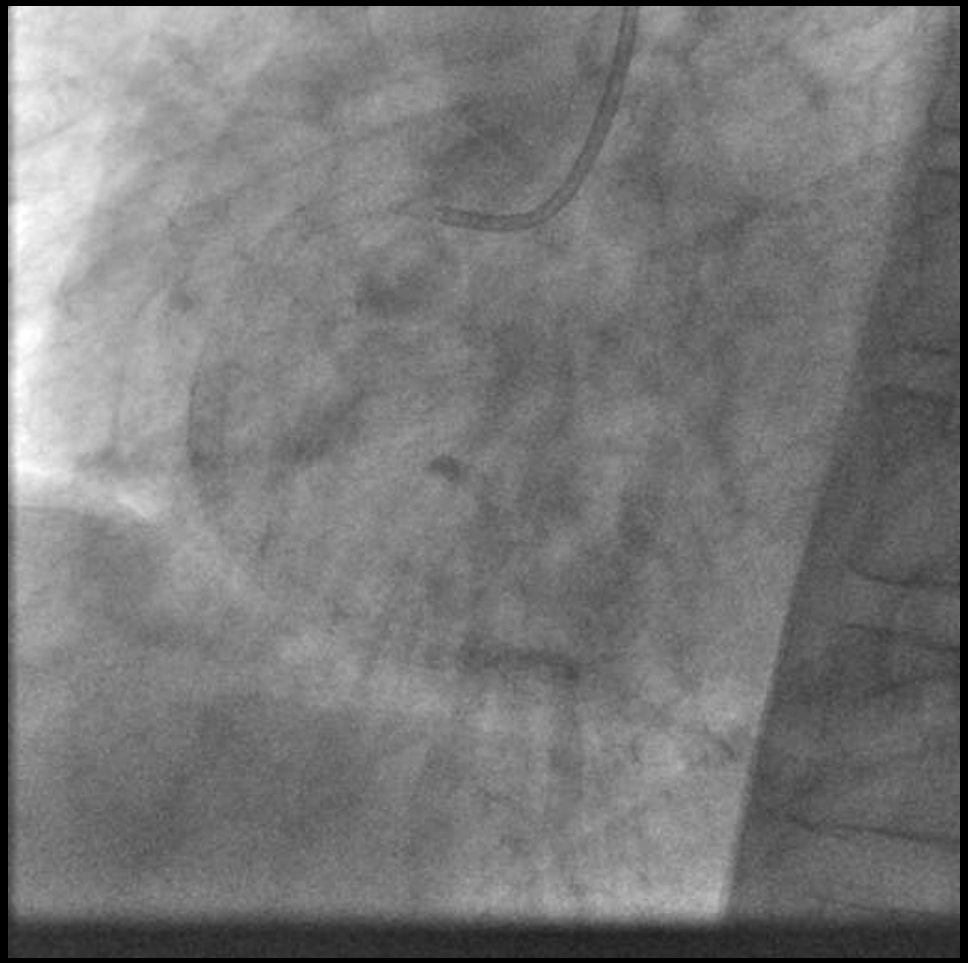


ϕ25 mm
GoseNeck Snare Kit









Take Home Massage

- Manipulate catheter gently to avoid catheter kinking
- If catheter kinking occurs :
    1. Don’t panic
    2. Prevent catheter fracture
- Do not over-rotation, push forcefully a guidewire through the kinked segment or repeat attempts to pull the catheter back into the sheat
- Removal of the kinked catheter using the GooseNeck snare is a safe and easily applied procedure

Thank You