

How to management coronary perforation during complex PCI






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Coronary perforation

TYPES OF CORONARY PERFORATION

There are five types of coronary perforation: Type I, Type II, Type III, Type IV and Type V. Type I and Type II are lower risk, but one needs to be particularly aware of the risk of progression to Type III. Type III, Type IV and Type V are the most serious types of perforation where expedient treatment is crucial in order to save lives.

TYPE I	Extraluminal crater without jet extravasation	TYPE I ▶	
TYPE II	Pericardial or myocardial blushing without jet extravasation	TYPE II ▶	
TYPE III	Active jet extravasation exit jet > 1mm	TYPE III ▶	
TYPE IV	Leaking into another cardiovascular cavity	TYPE IV ▶	
TYPE V	Distal perforation	TYPE V ▶	

#Case1

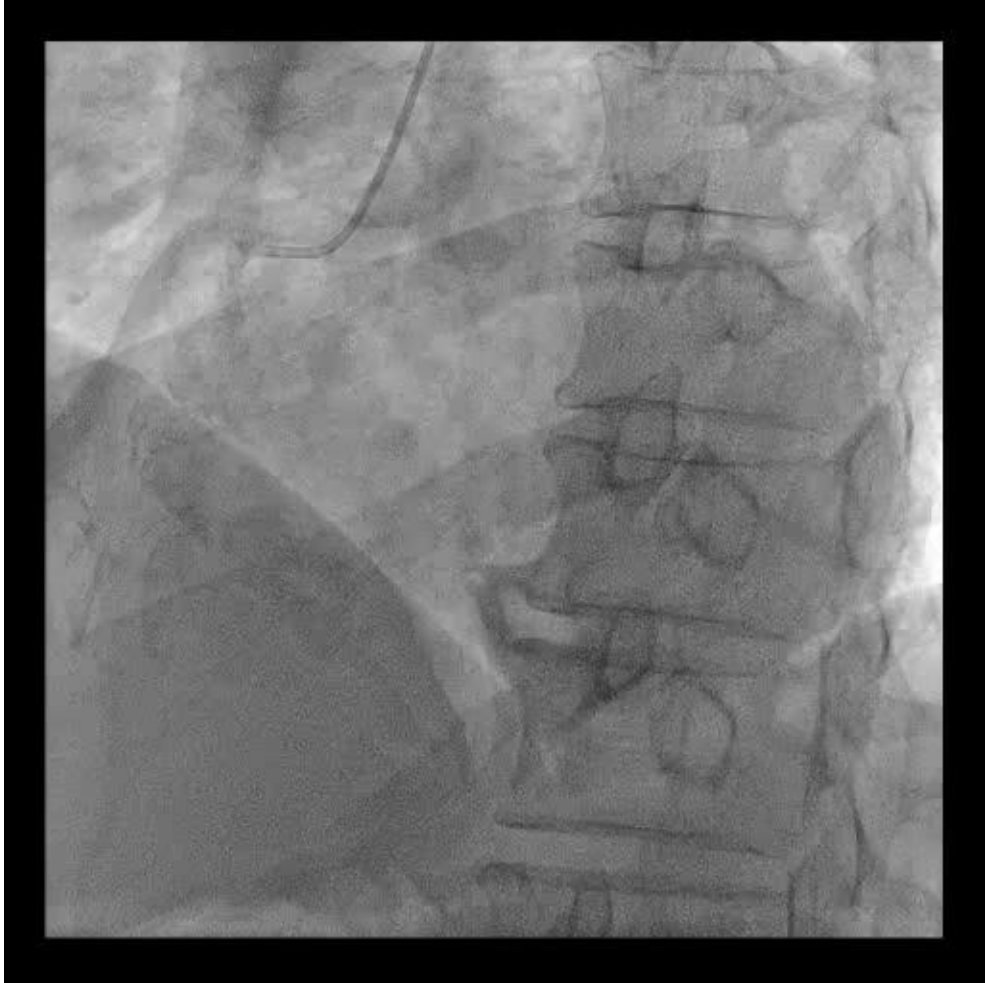


AP CAU



AP CRA

Coronary angiography (PCI 1)



RCA (Pre)

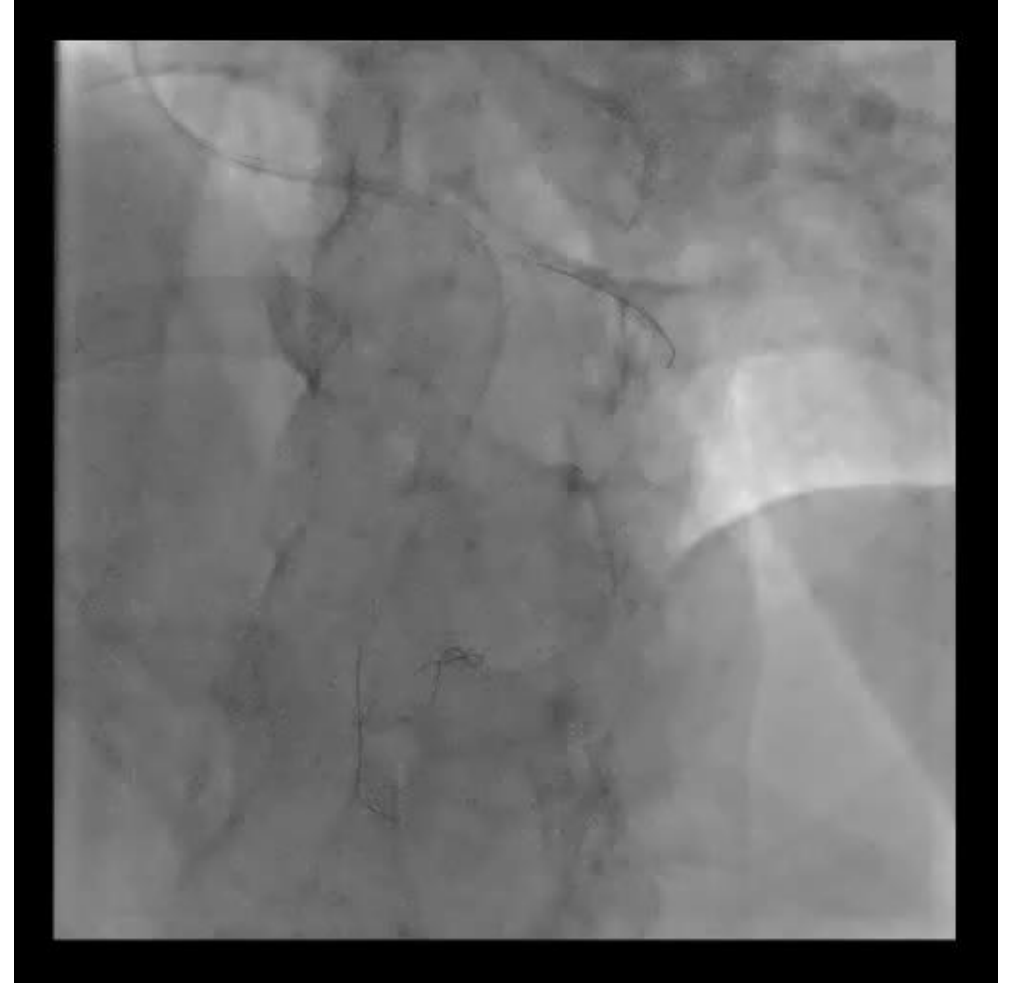


RCA (Post Stent)

Coronary angiography (PCI 2)

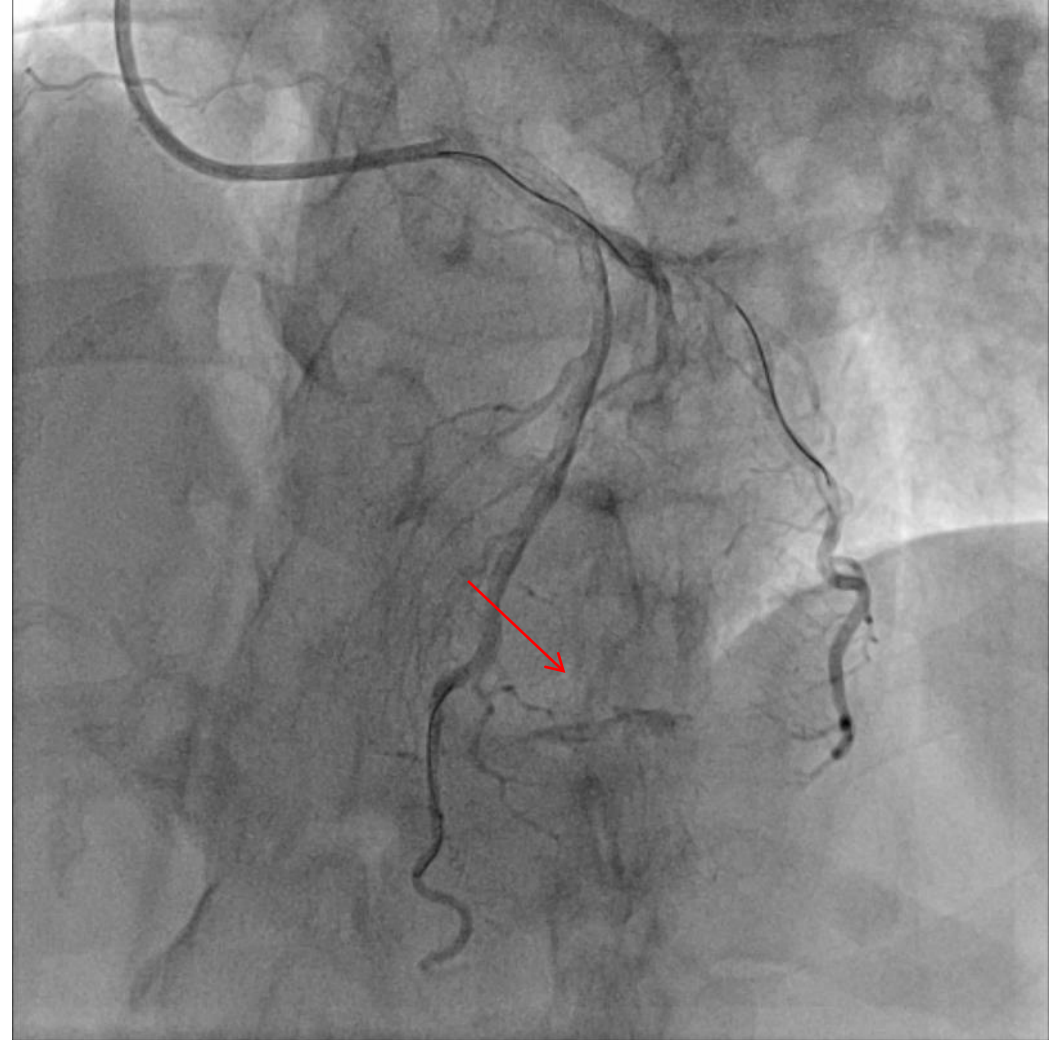
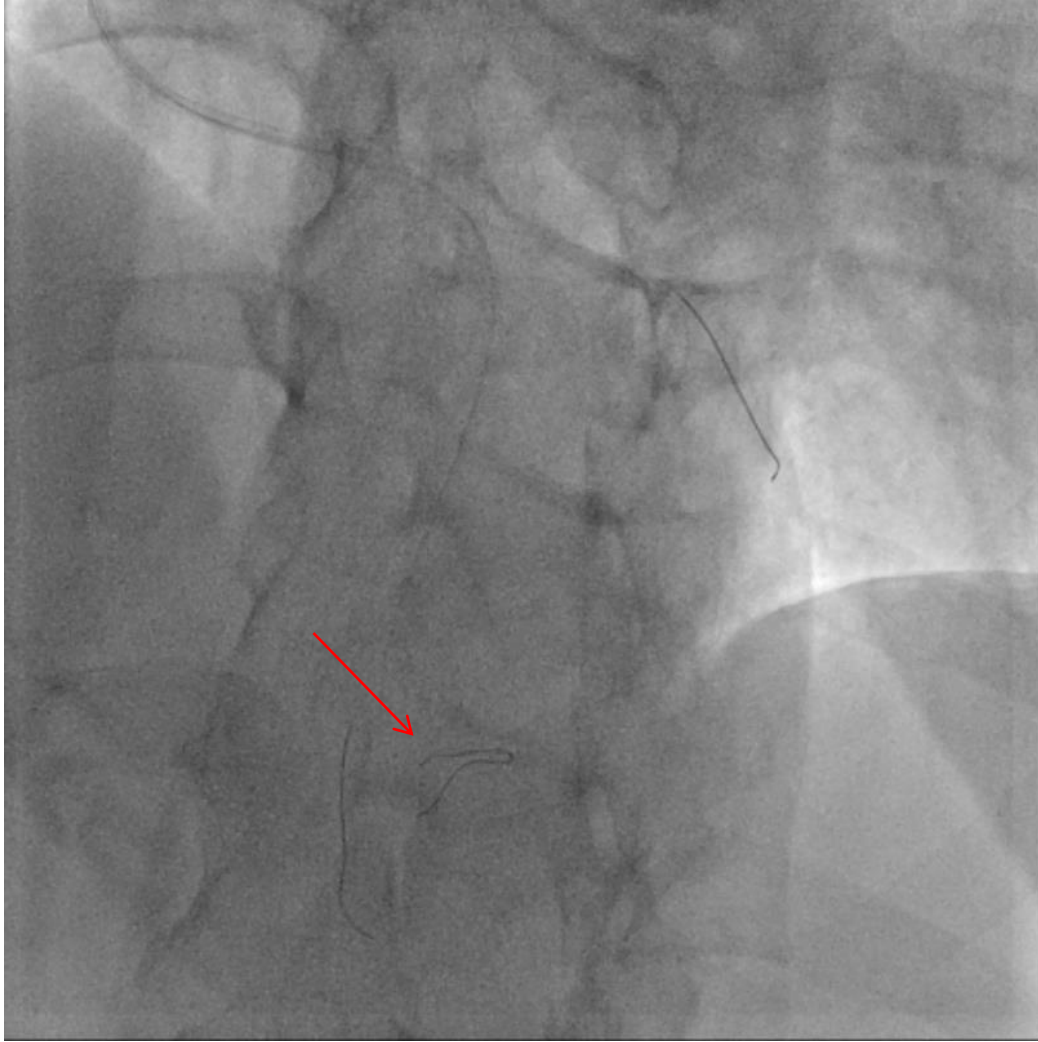


LAO CAU

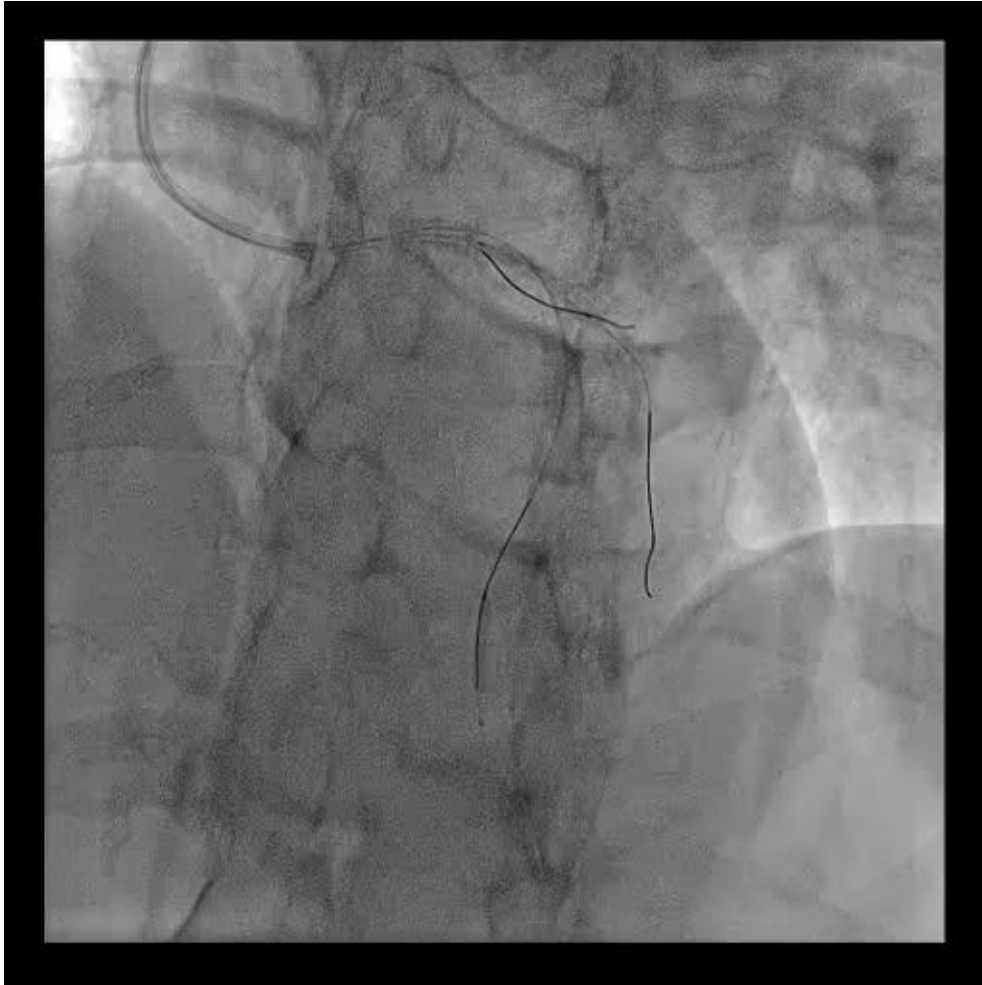


Wire **perforation**

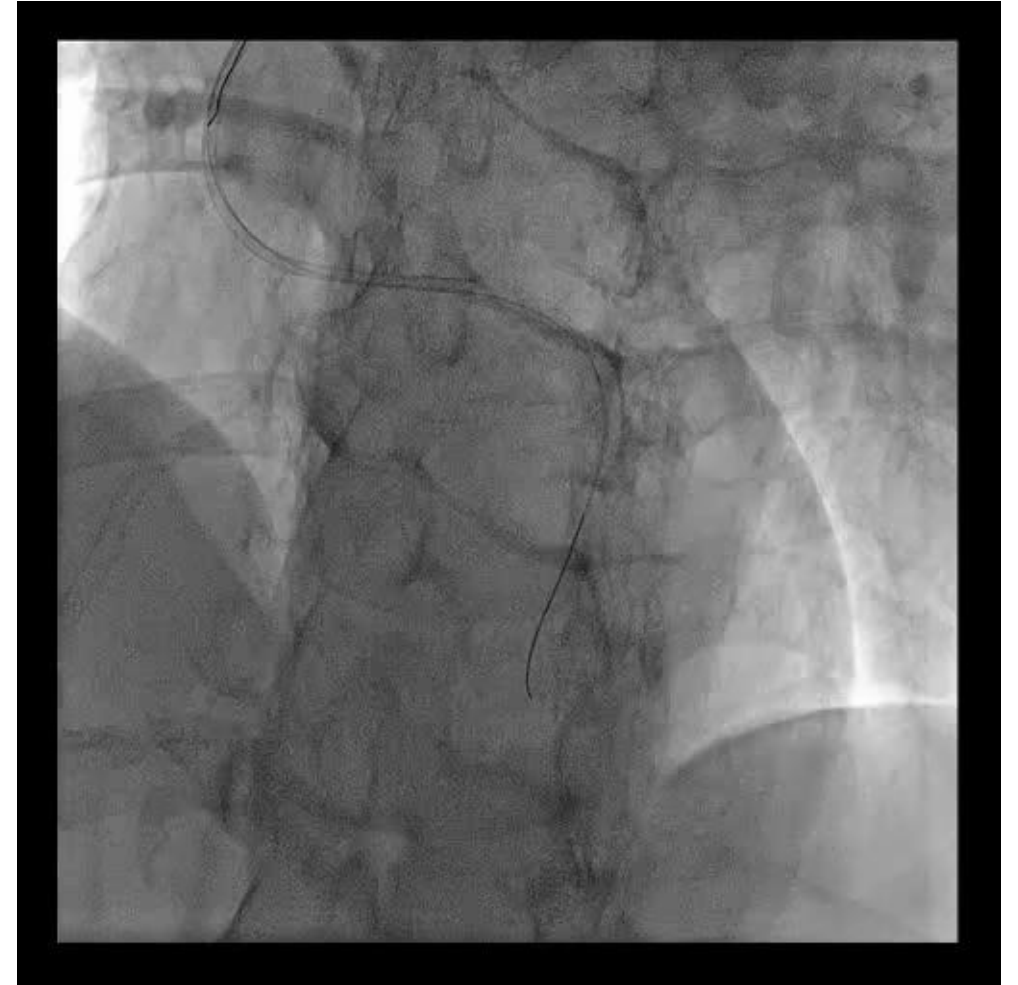
Wire Perforation



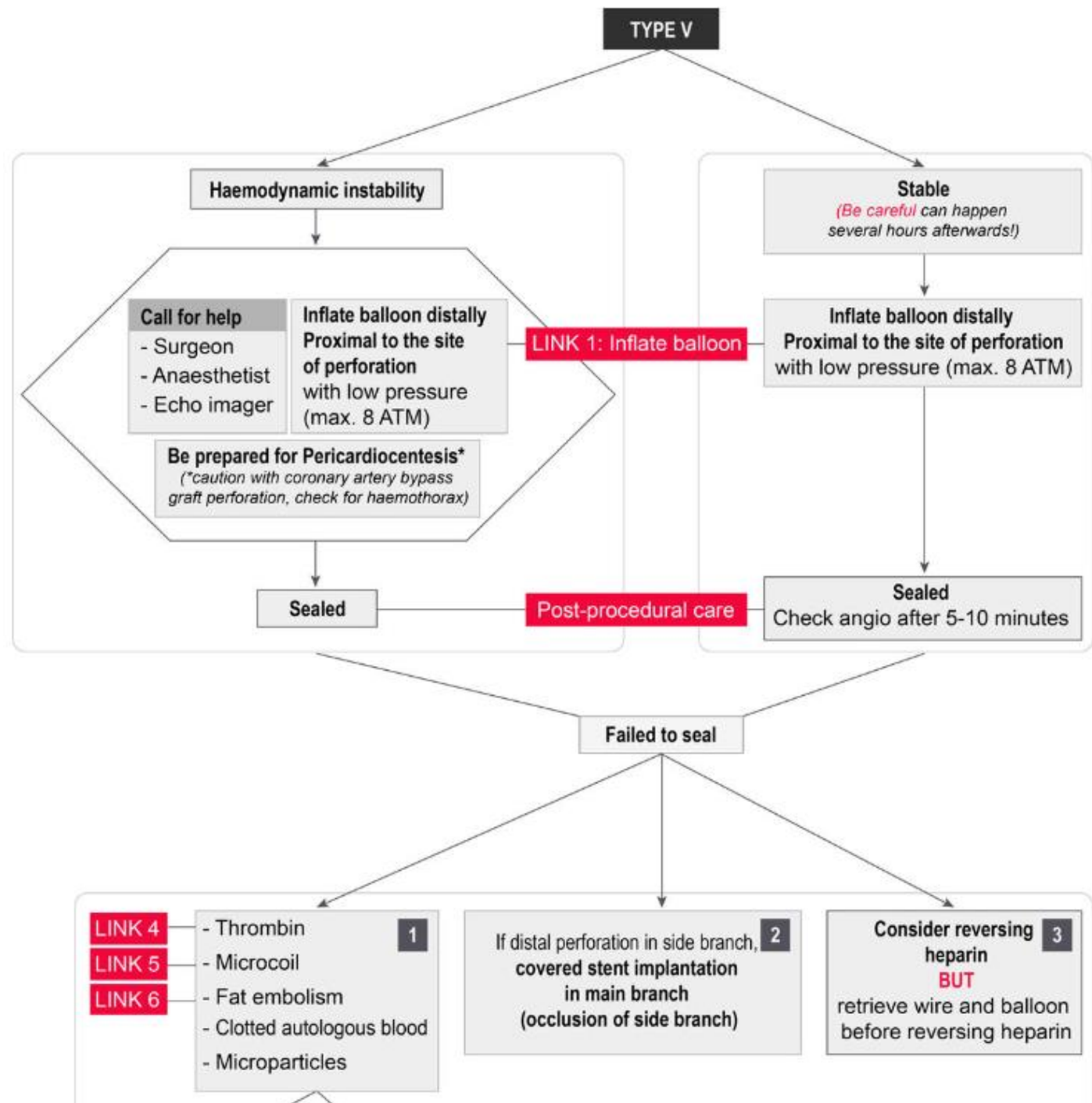
Coronary angiography



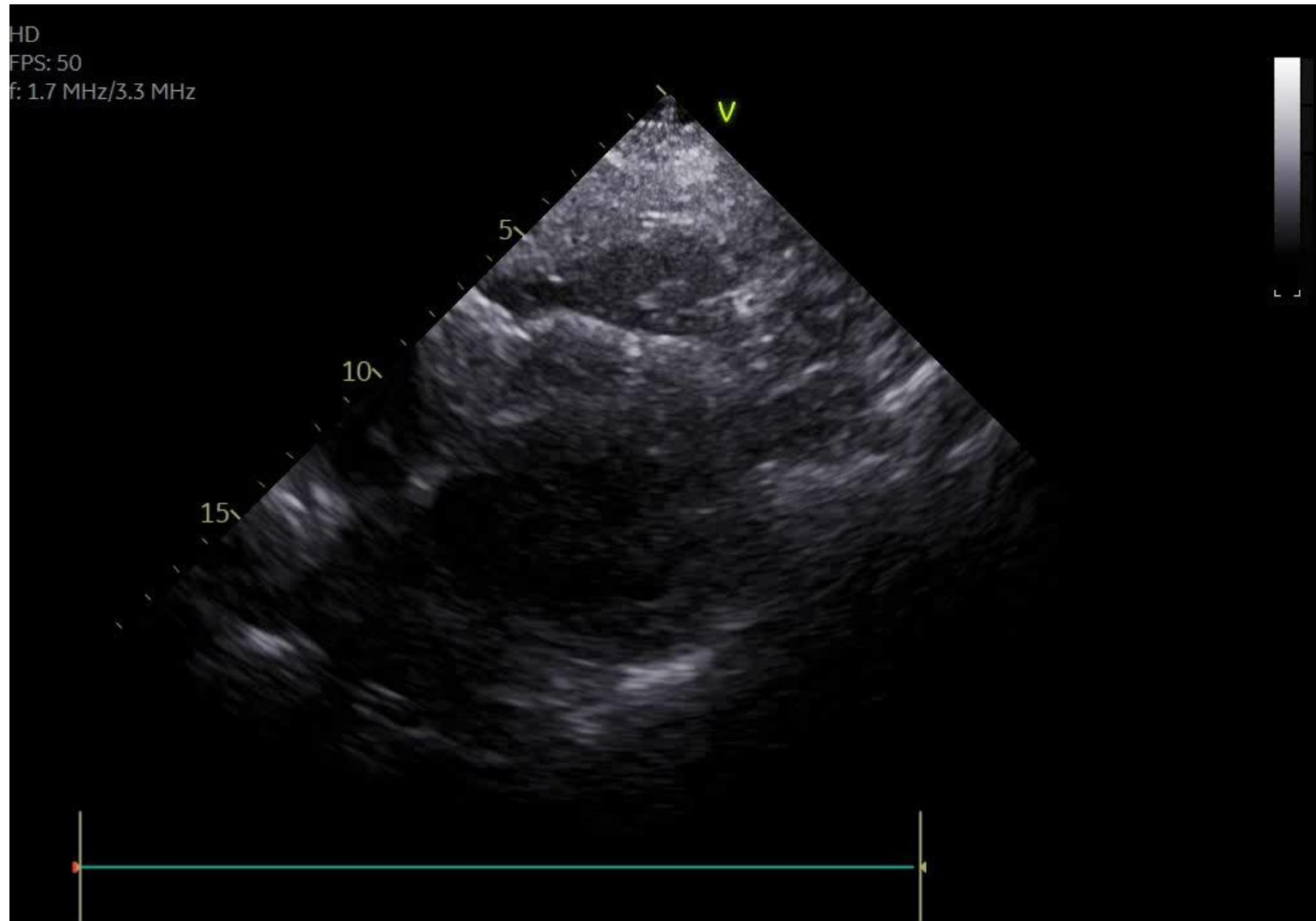
Balloon embolization



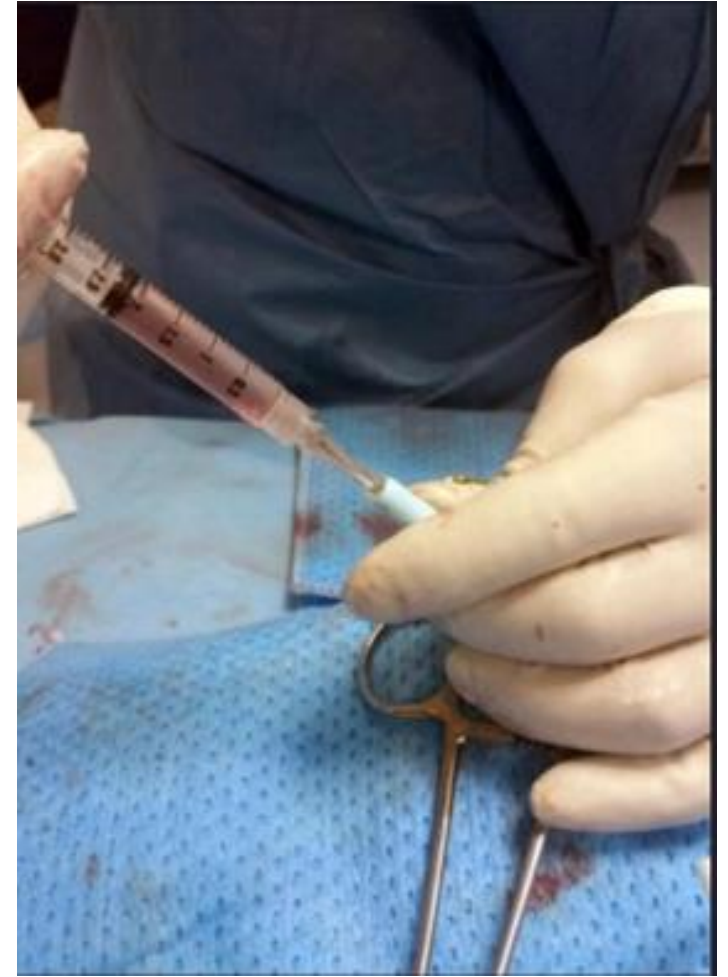
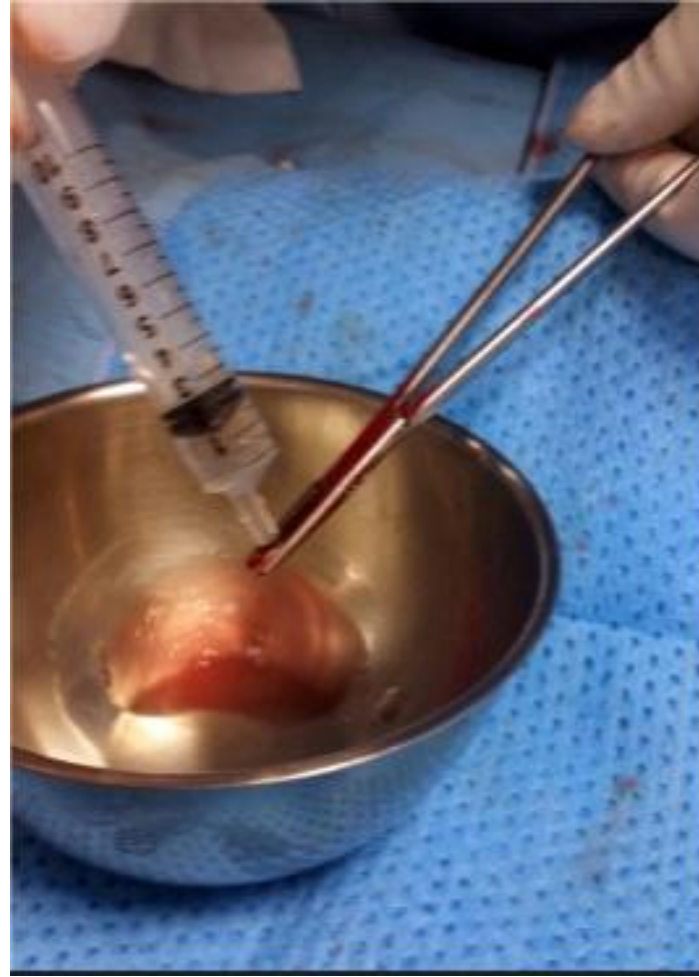
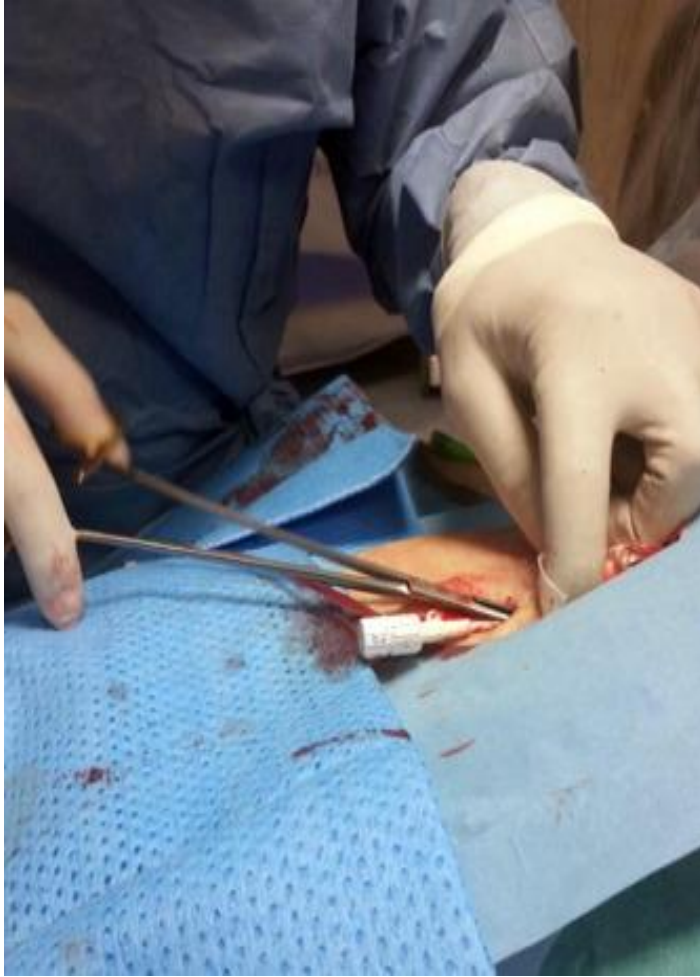
Post balloon



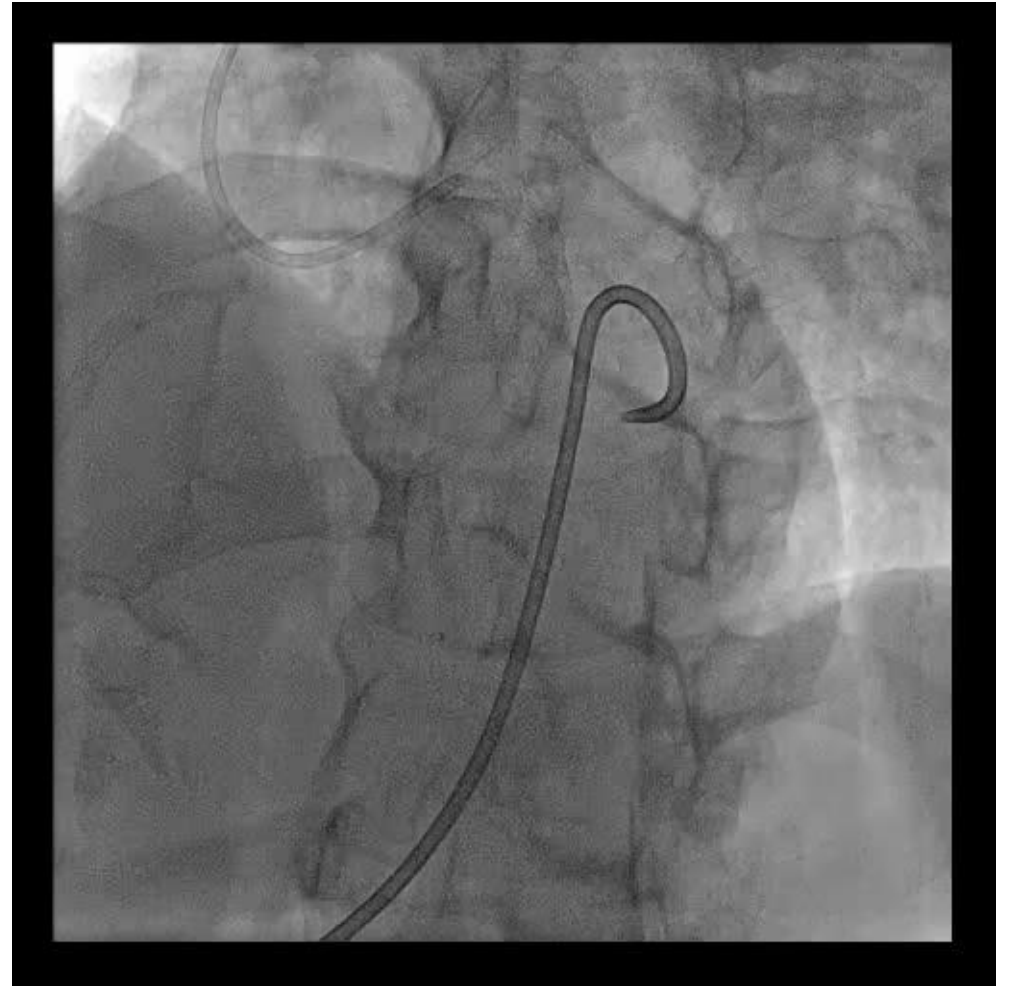
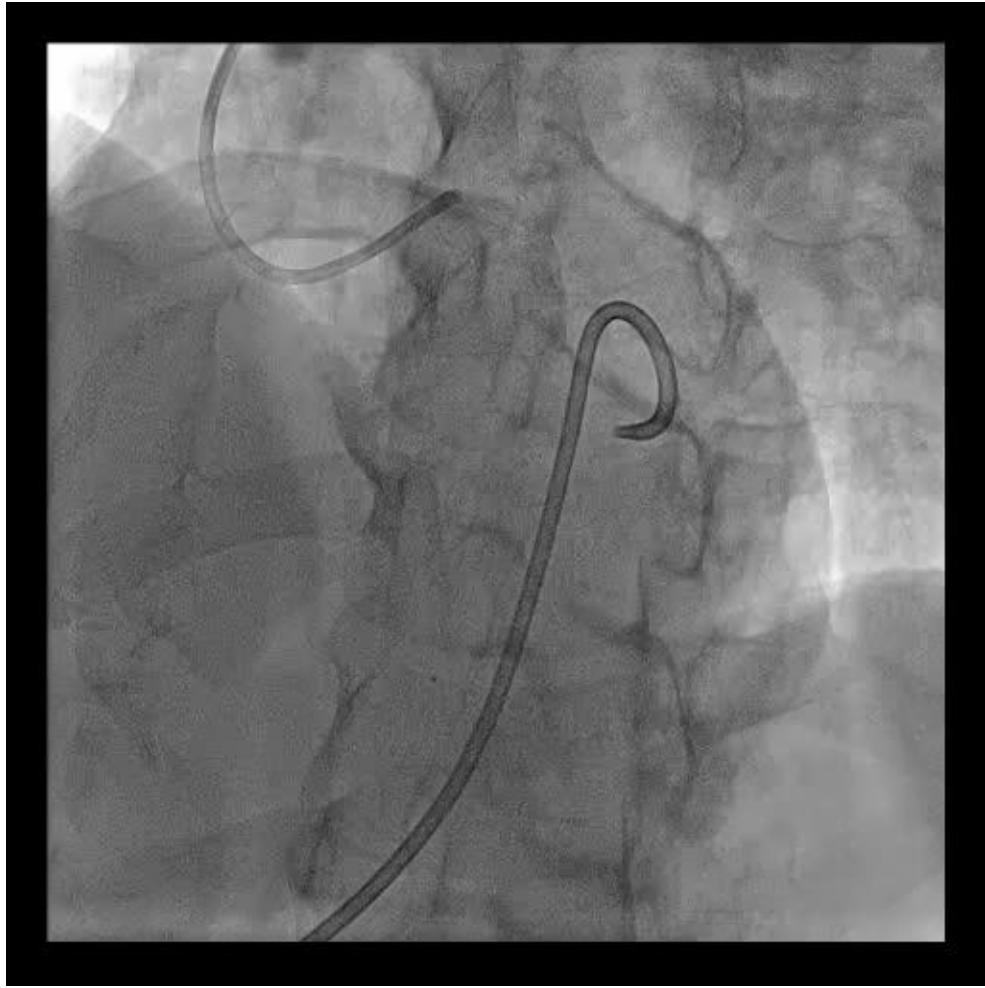
Portable Echo



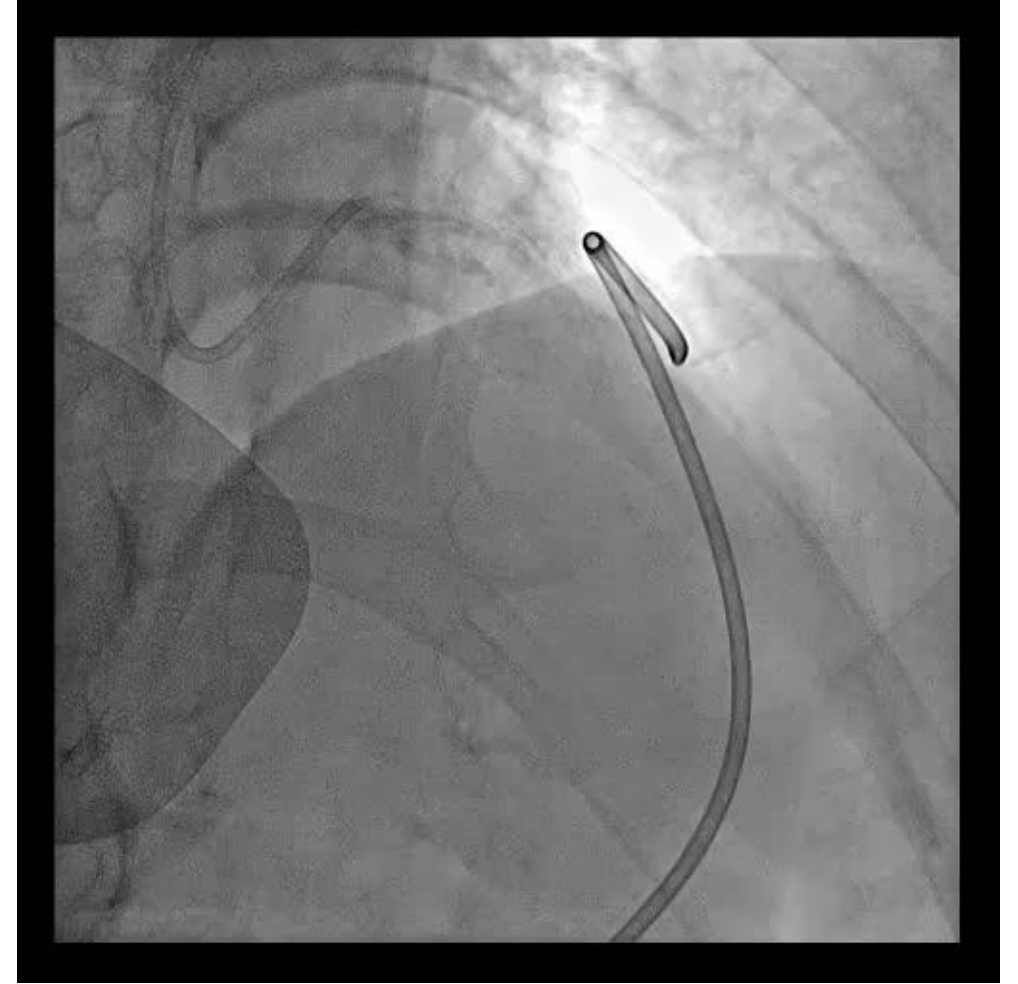
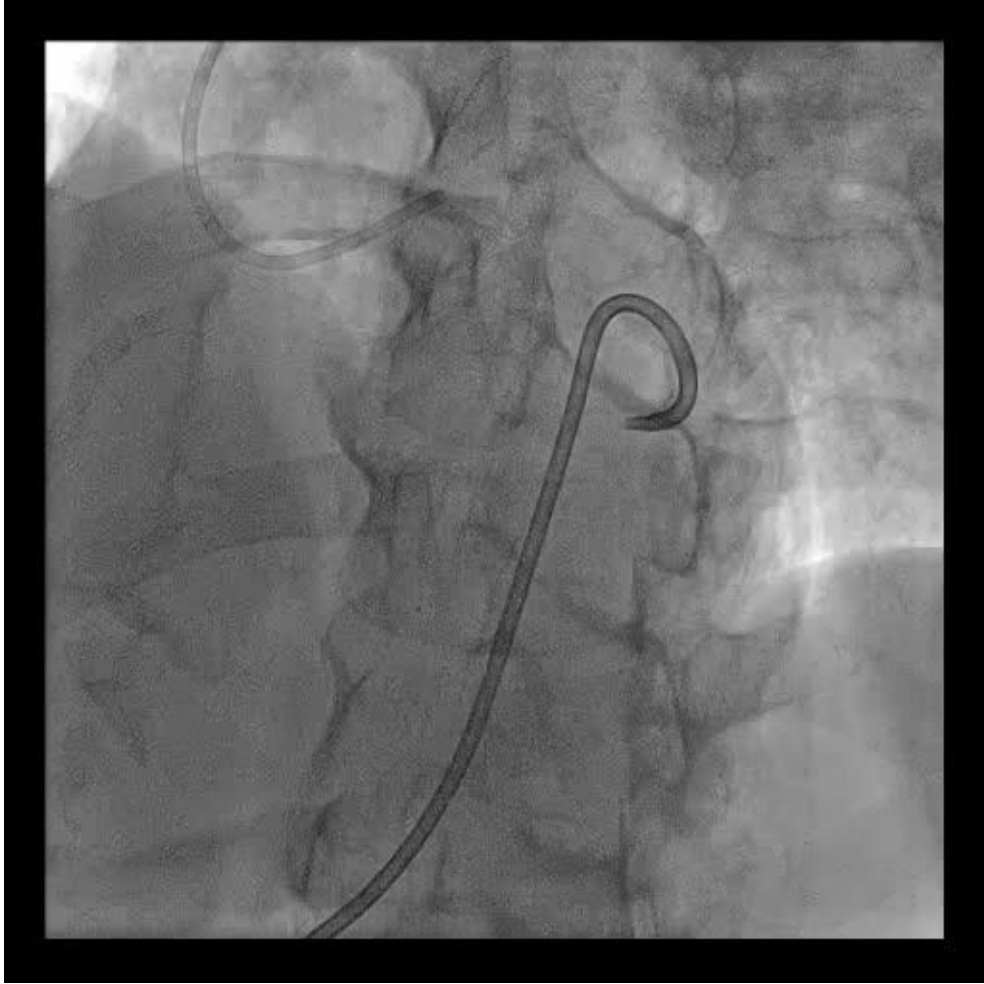
Fat embolization



Fat embolization



Coronary angiography (PCI 1)

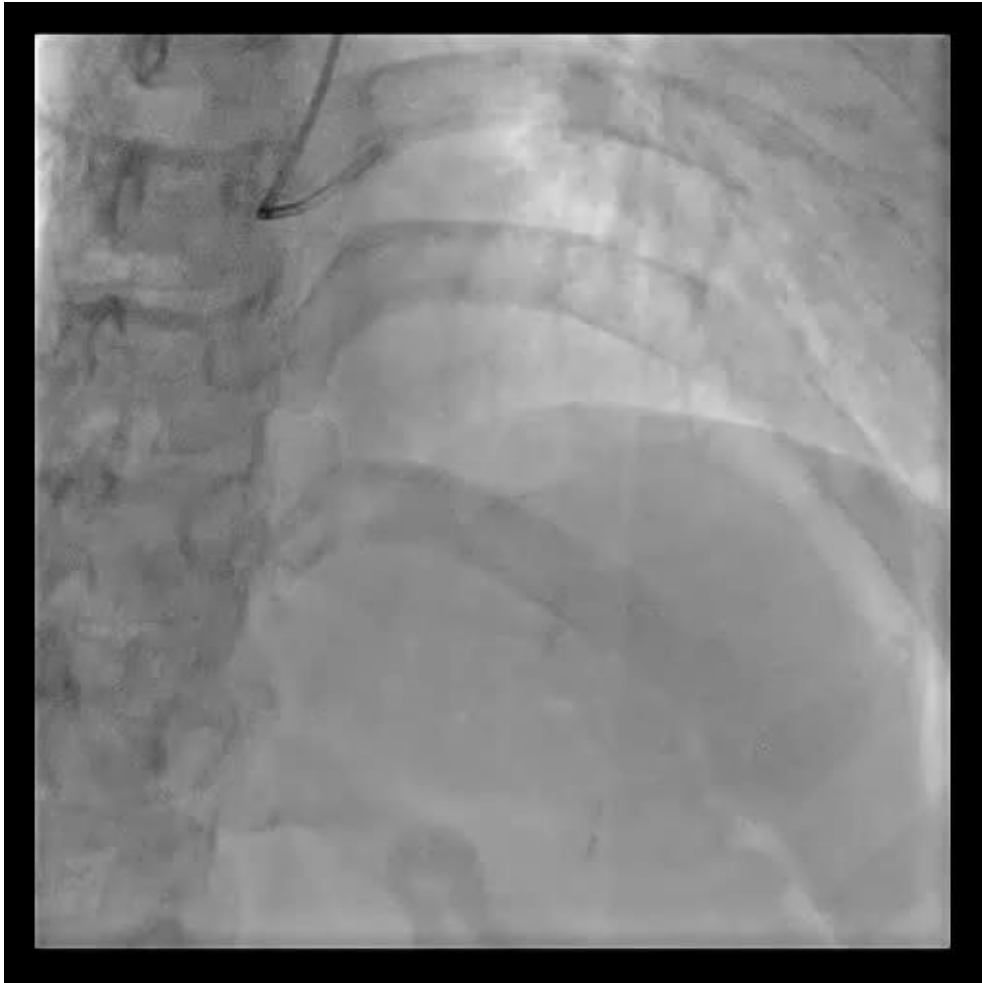


Final angiography

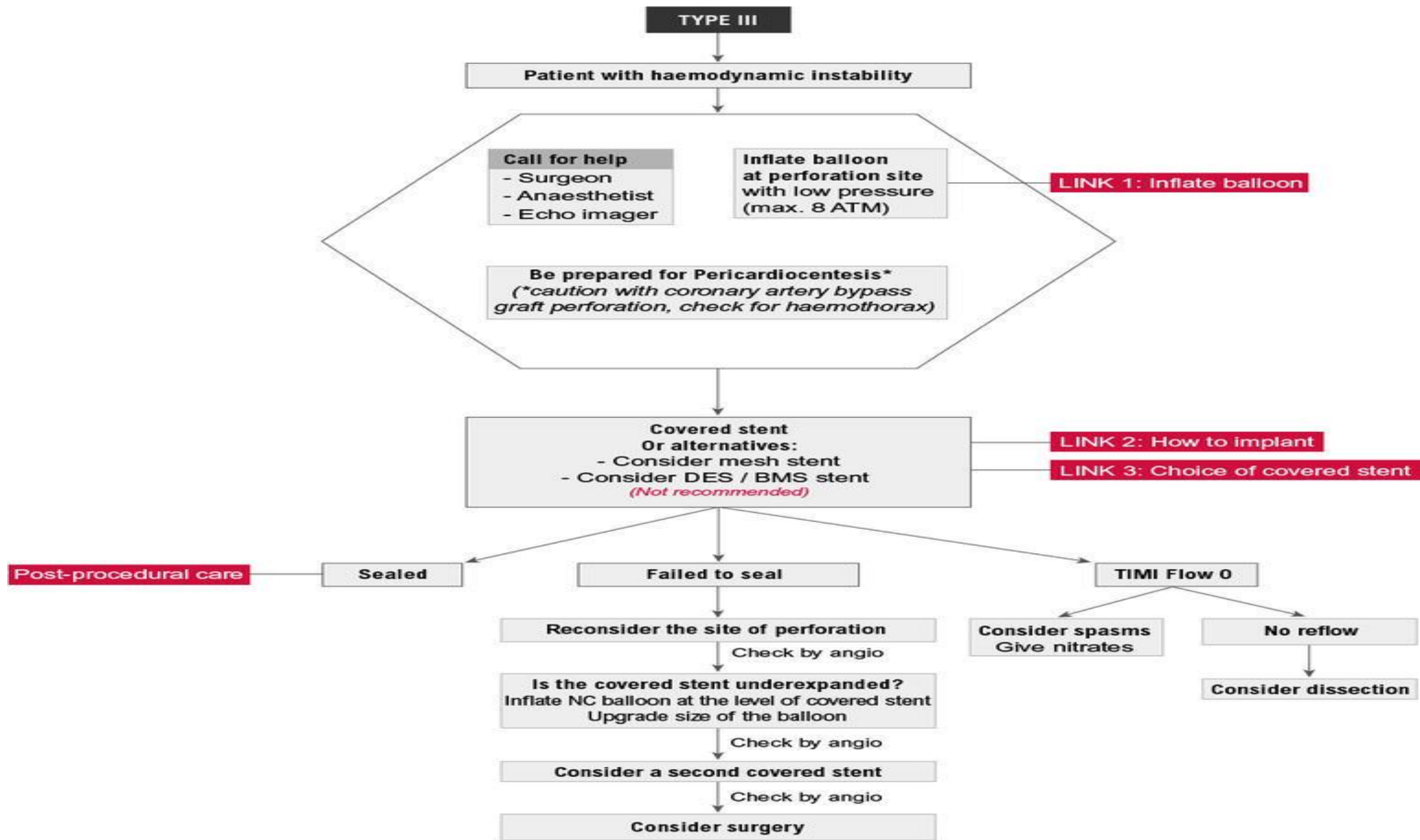
#Case2



RAO CAU



AP CRA



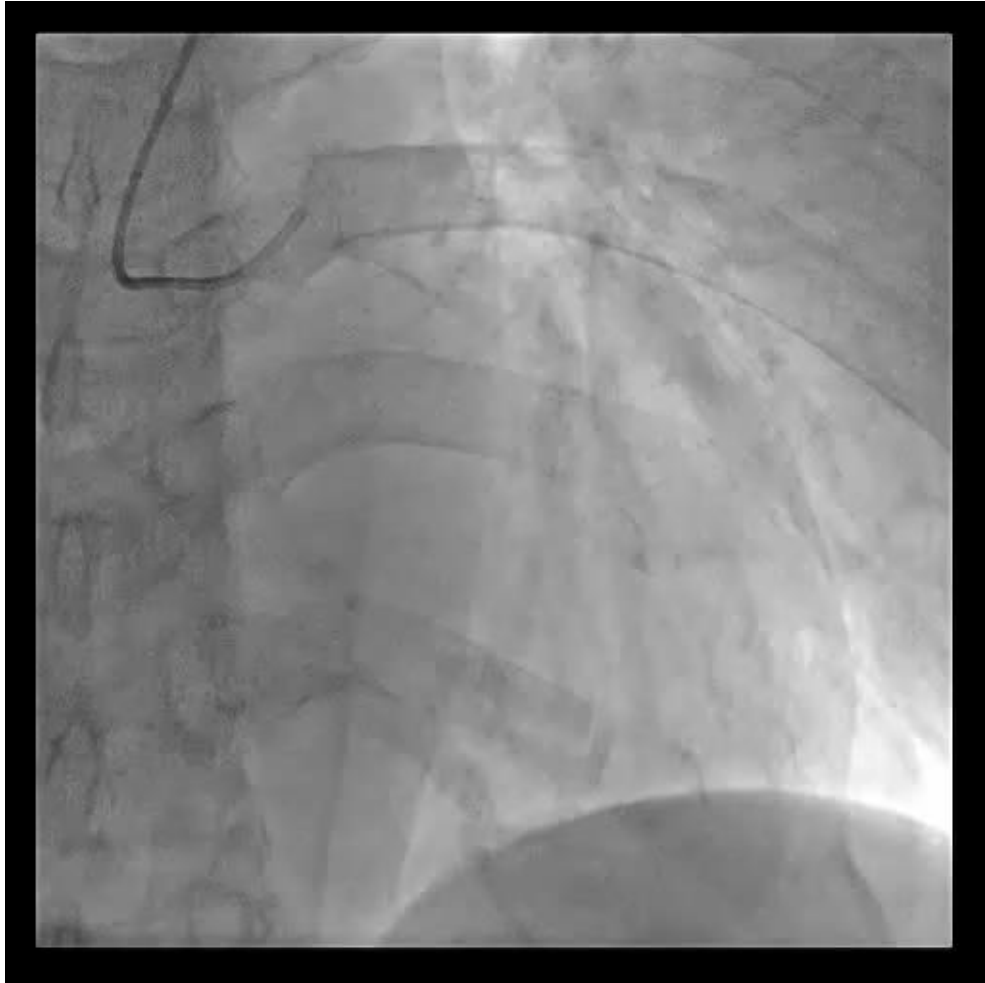


Post PCI



Post Graft stent

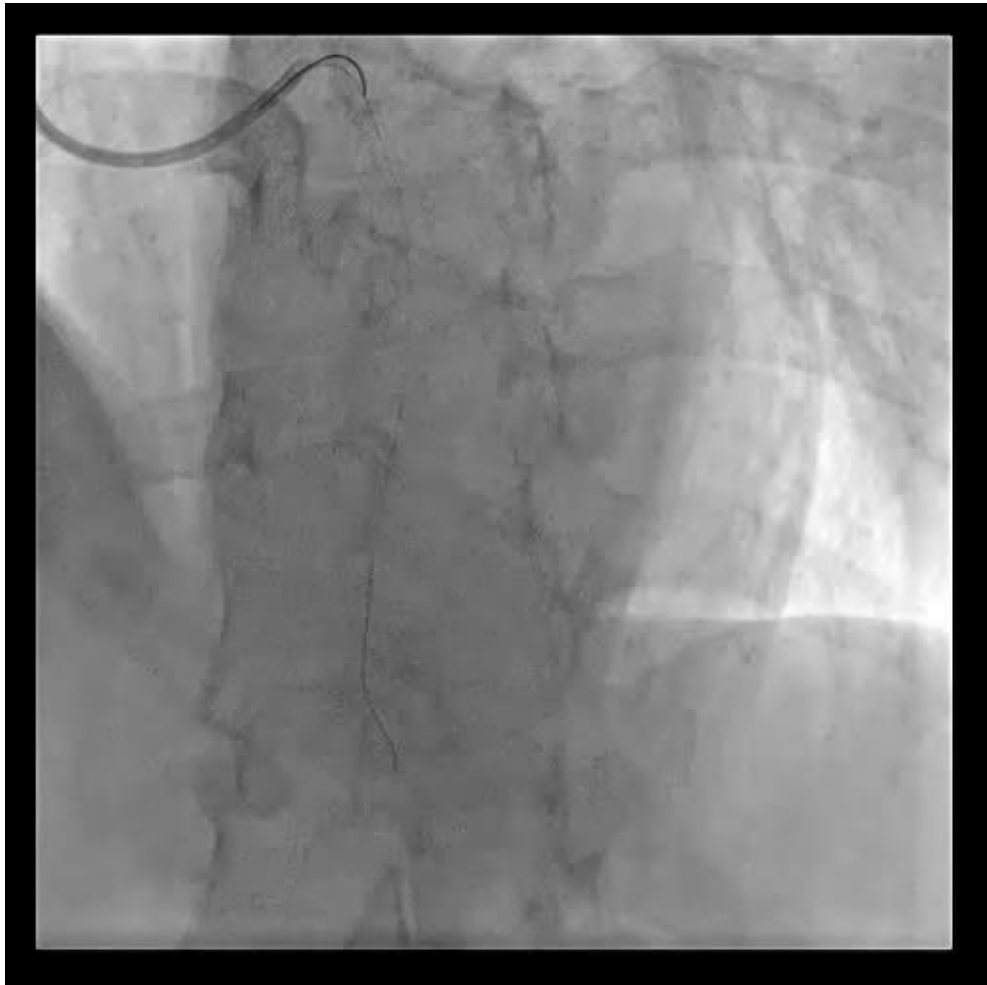
#Case3



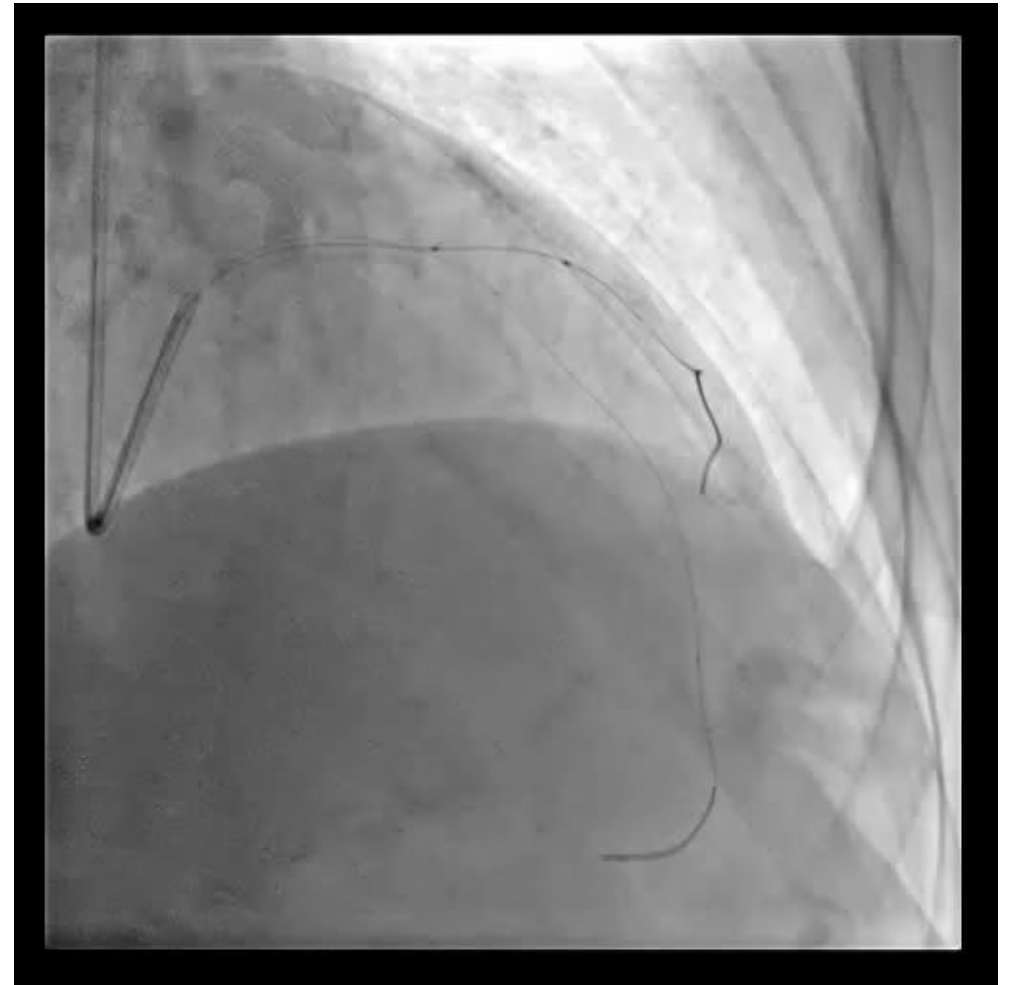
AP CRA



LAO CRA



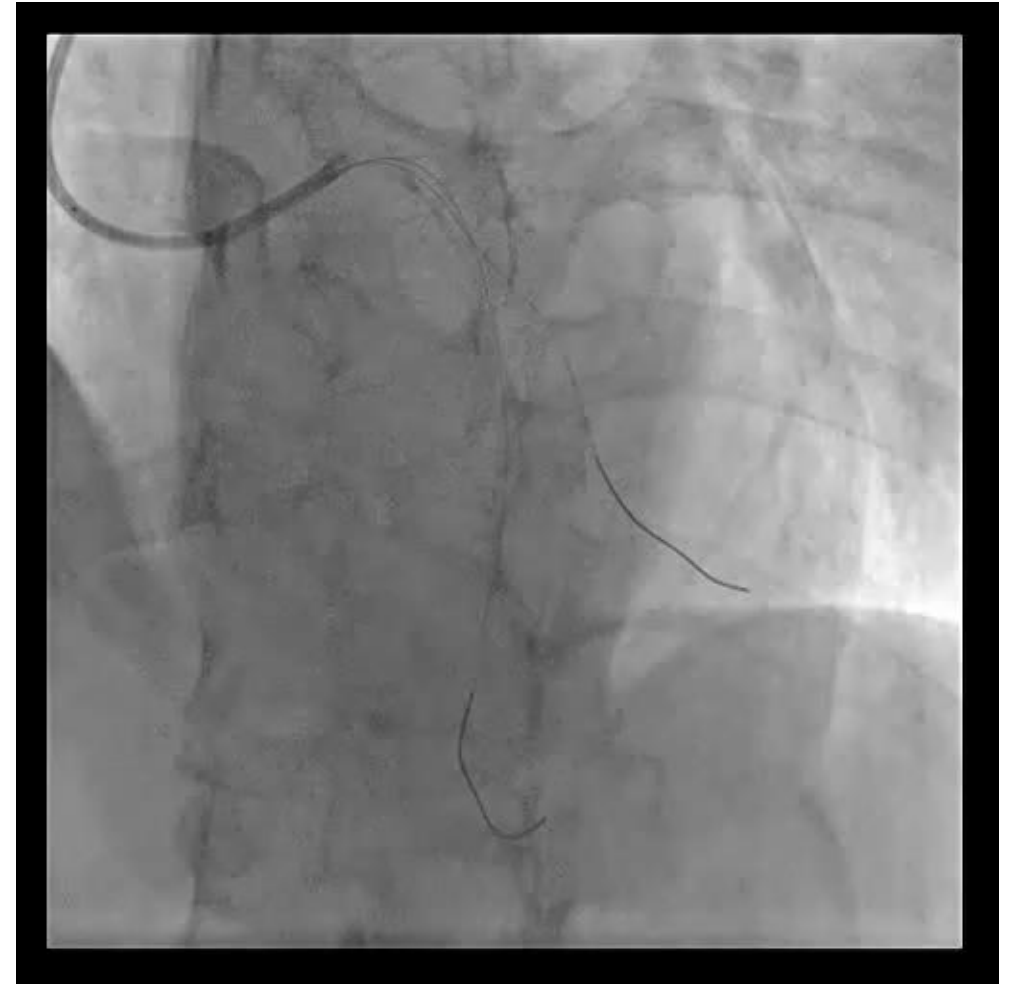
D1 jail



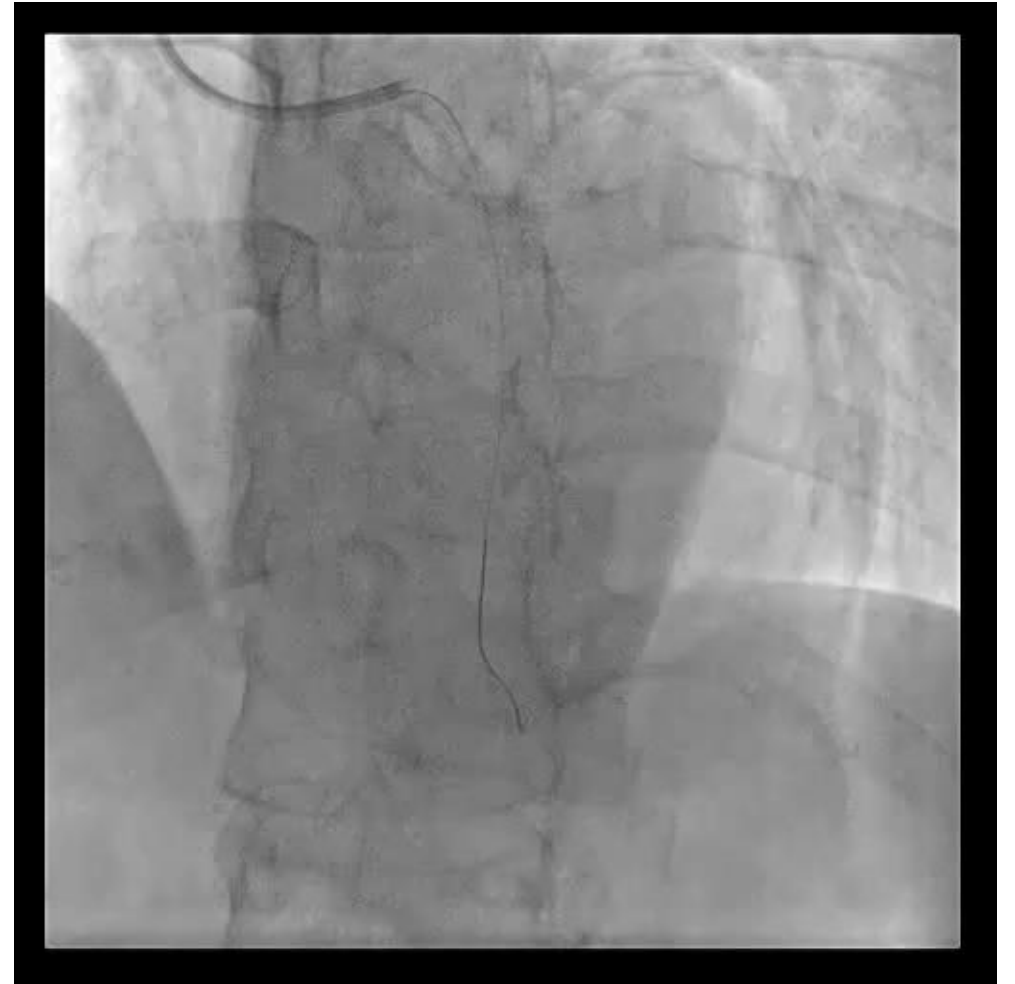
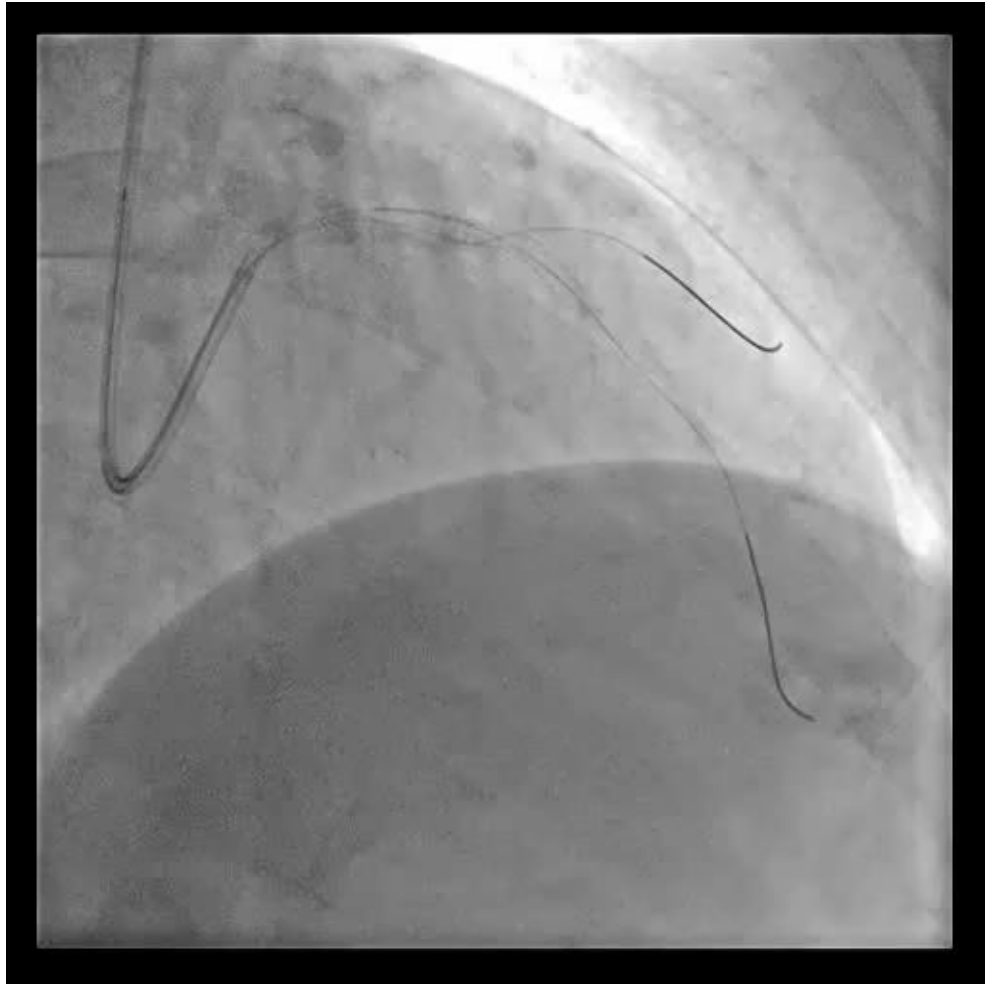
Post balloon



**Balloon implantation
5min**



**Post Balloon implantation
5min**



Final angiography

Conclusion

- **Balloon tamponade**
- **Graft stent Implantation**
- **Fat Embolization**