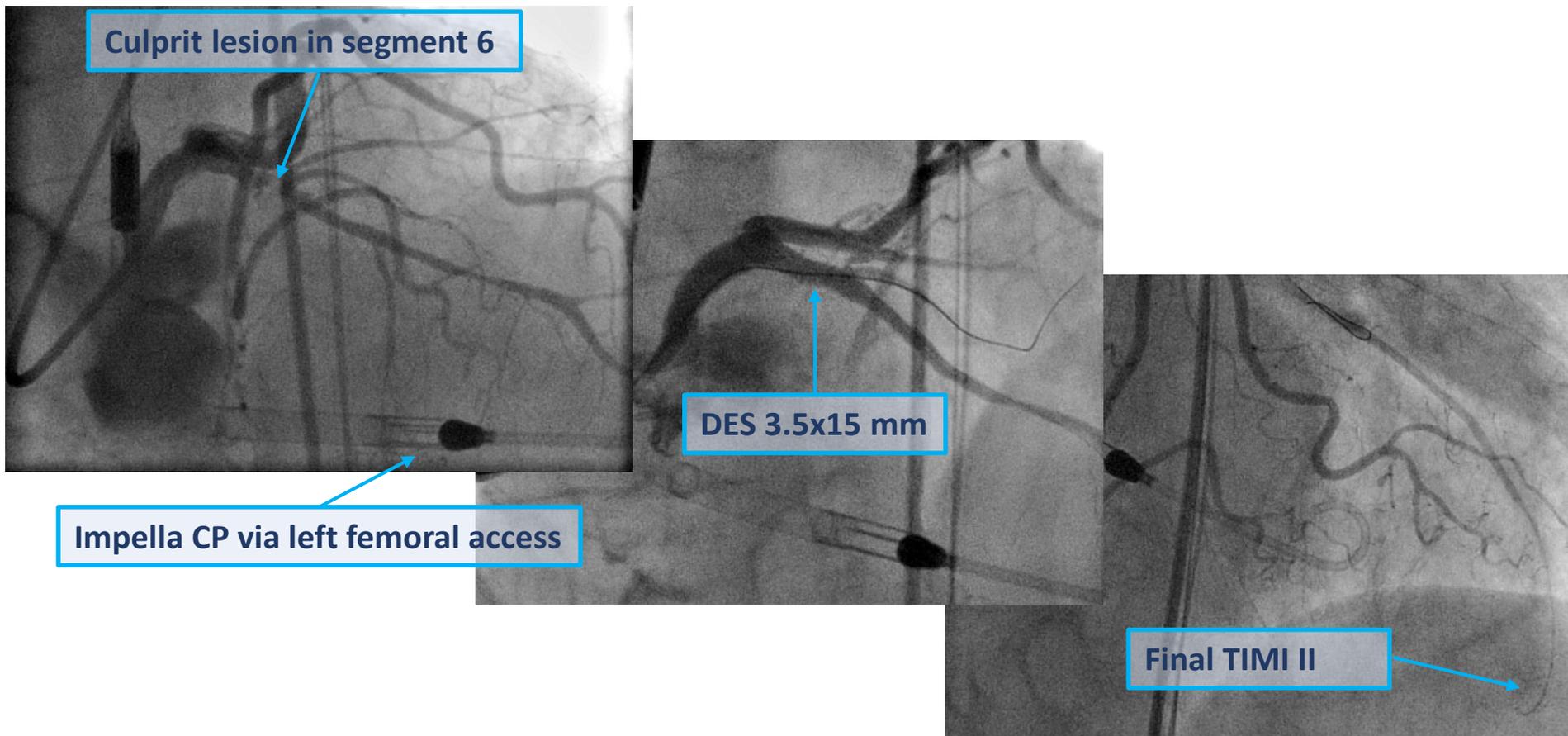




The Nightmare of the Accidentally Dislodged Impella



Persistent cardiogenic shock with no recovery of the severely impaired left-ventricular function despite of Impella CP and inotropics.

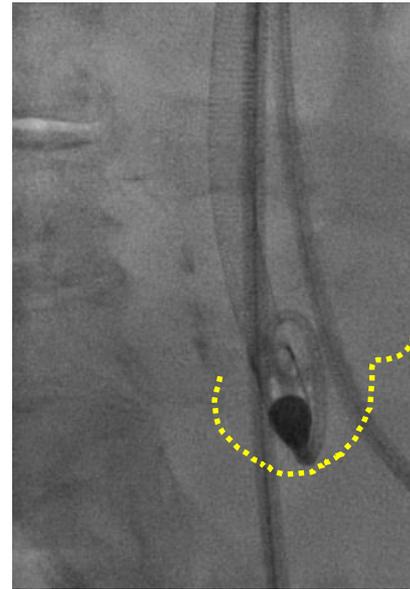
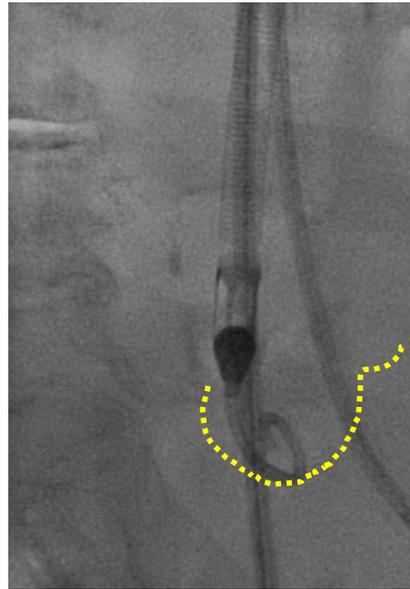
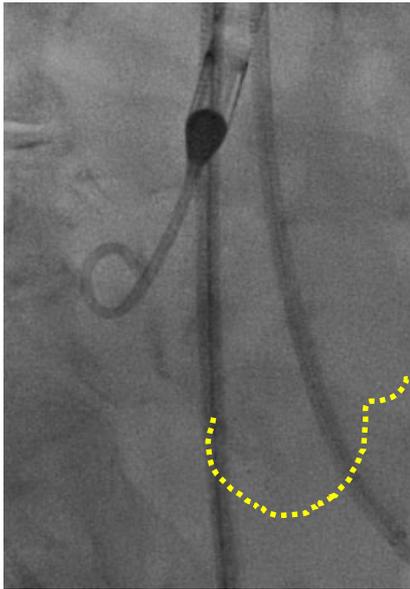
After 7 days **surgical** implantation of an Impella 5L via the right subclavian artery.

At day 15 accidental dislodgement of the Impella into the ascending aorta, followed by immediate pulmonary congestion.

Transfer to the Cathlab for repositioning of the Impella.

(Due to the hemodynamic instability a fast re-positioning was attempted, instead the placement of a new circulatory support system)

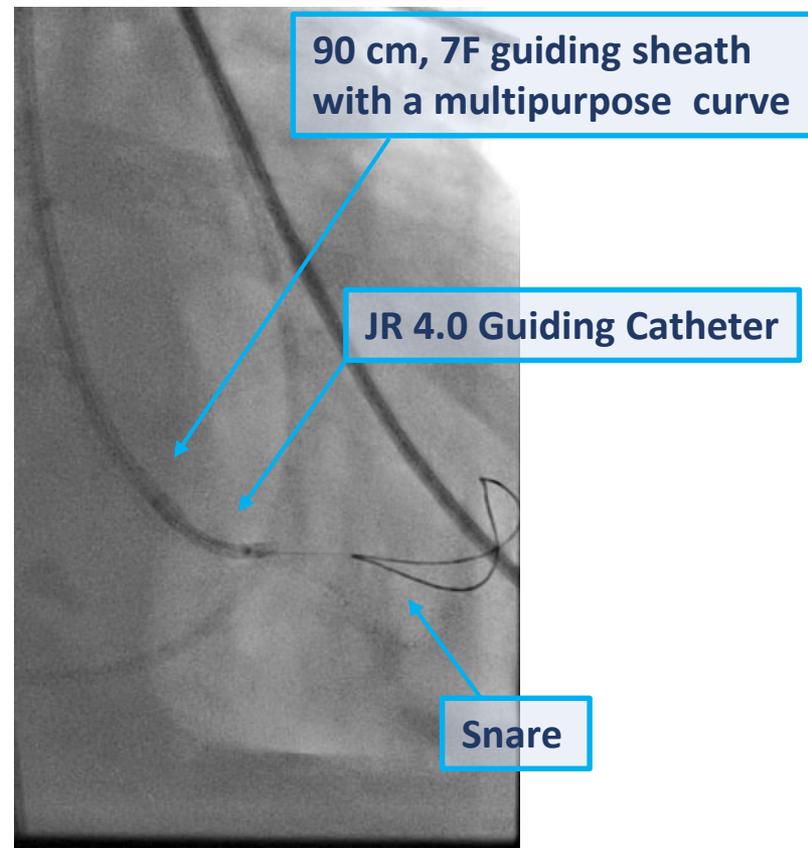
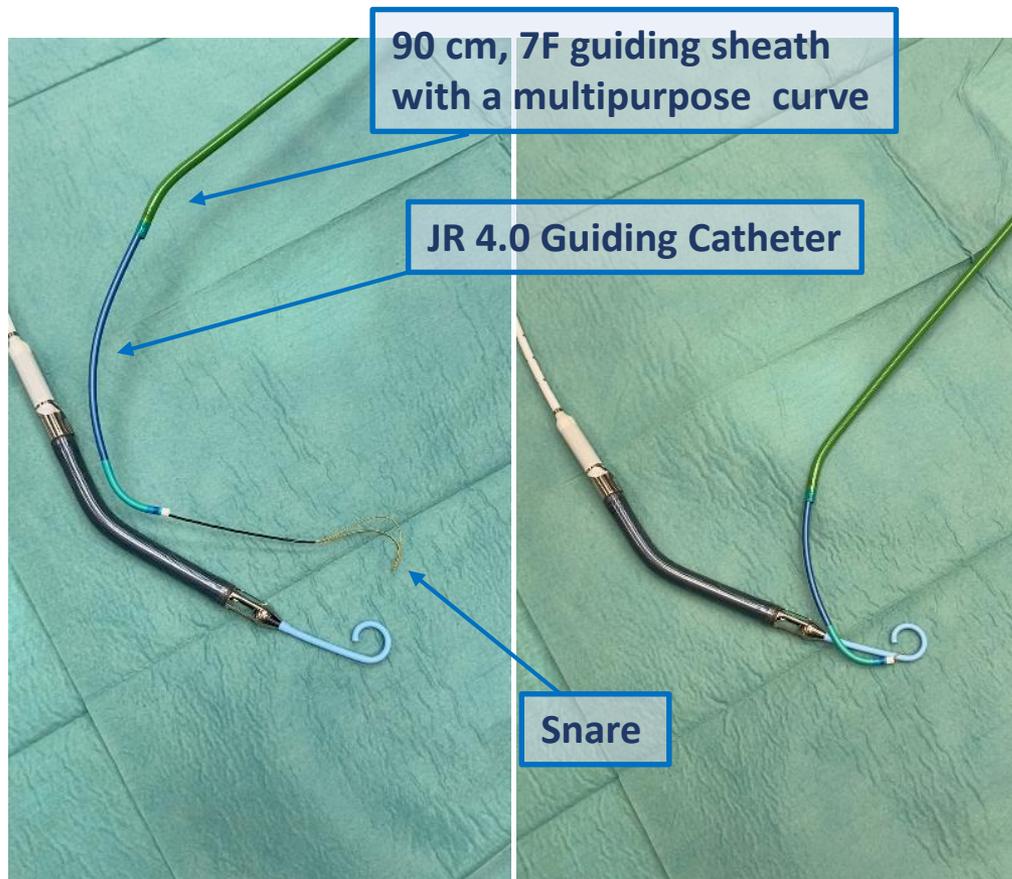
The Impella could not be re-positioned into the left ventricle. Normal tricuspid aortic valve, without stenosis.

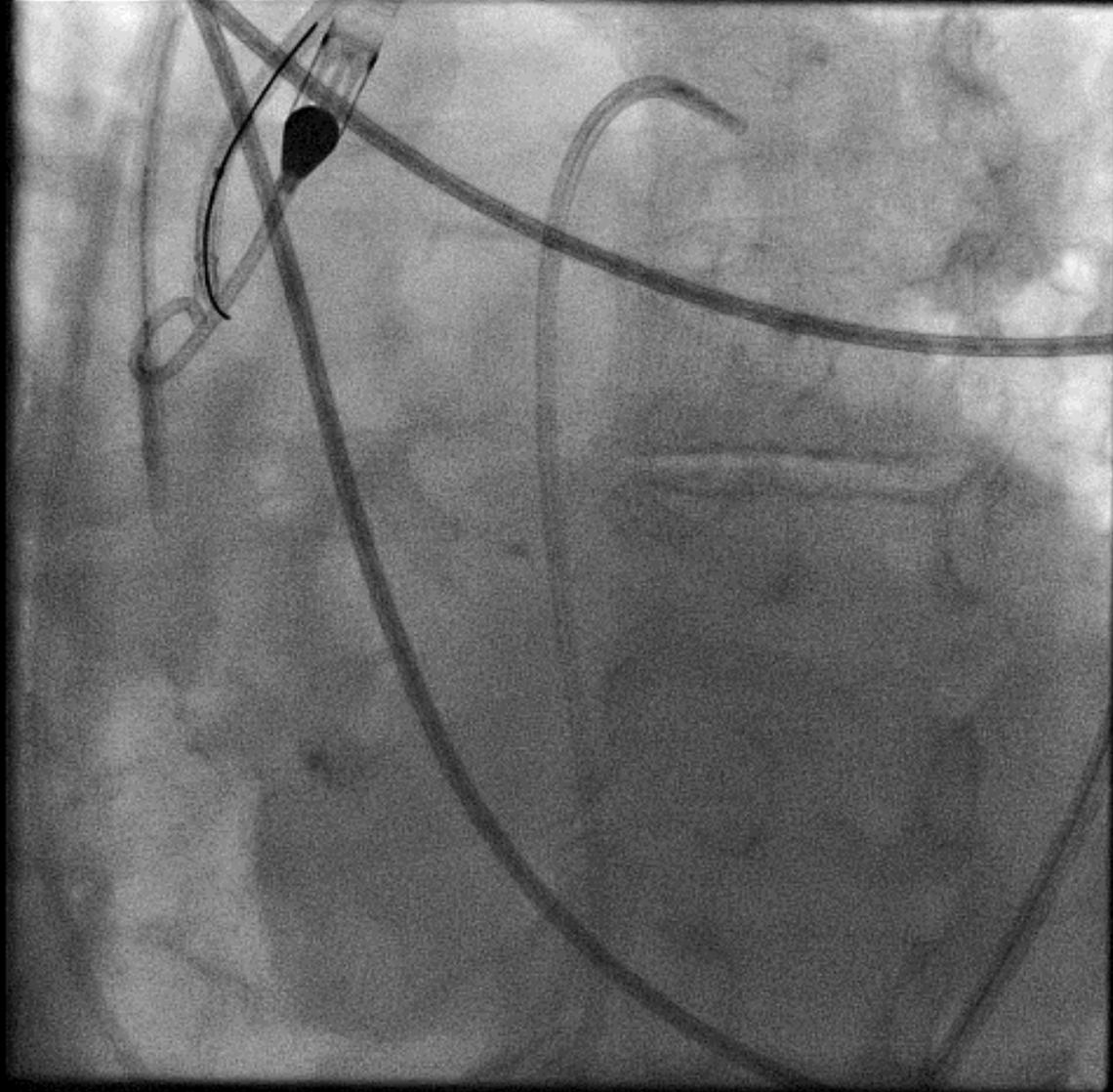


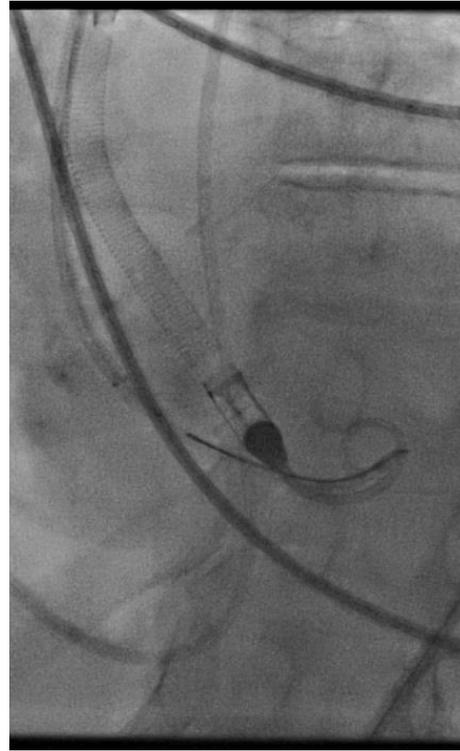
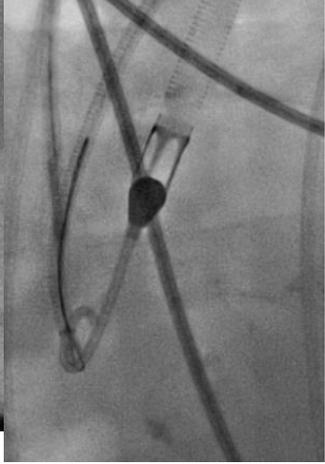
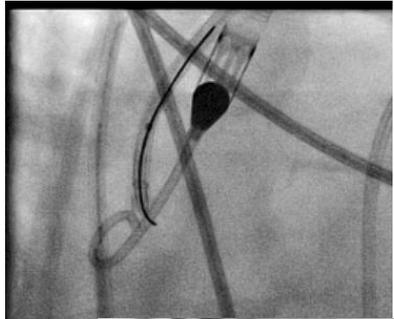
Even a ,buddy-wire like' manoeuvre failed:

A pigtail and an Amplatz superstiff guiding wire were positioned in the left ventricle to keep the aortic cusps open. However, the Impella failed to enter the ventricle with this technique.

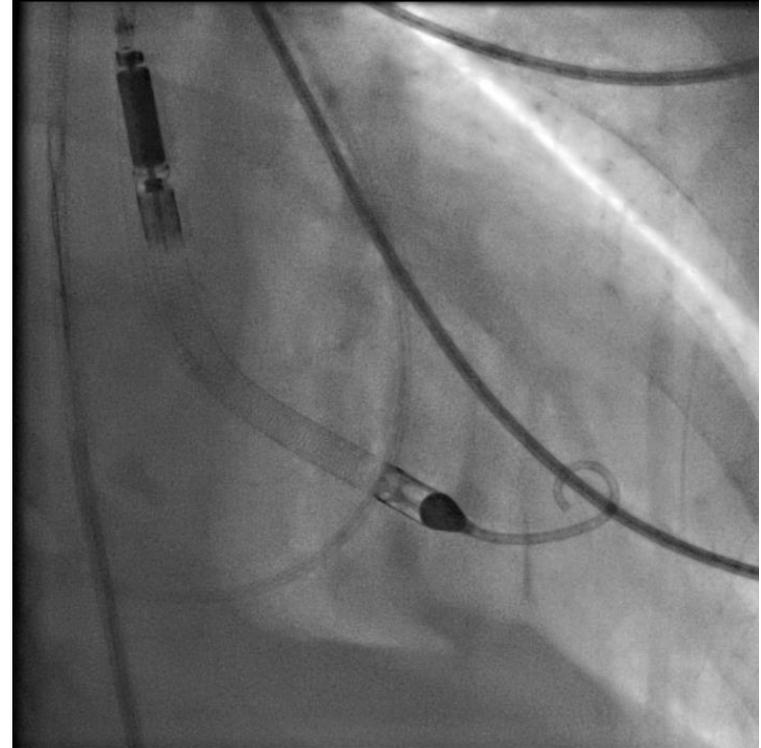
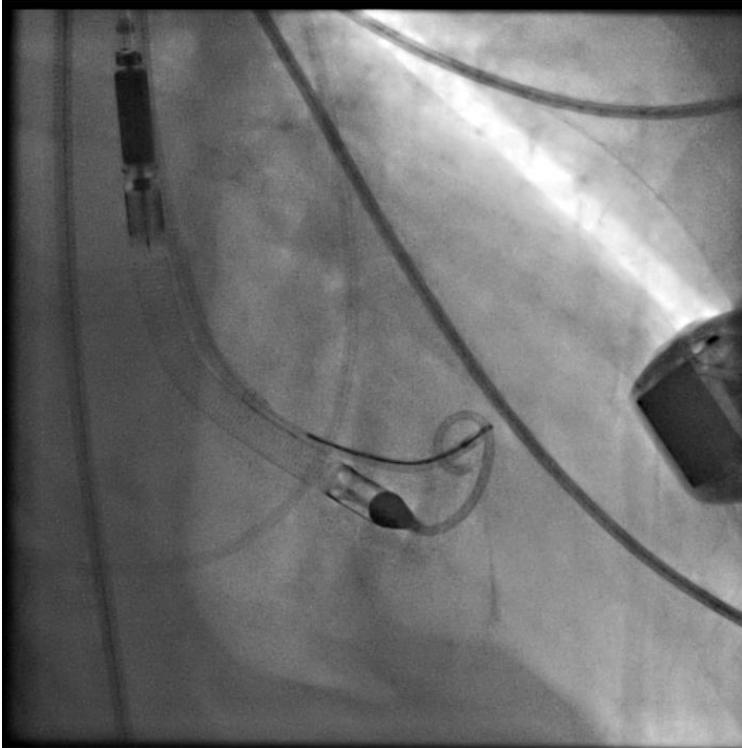
The 'Snare-based Technique' Setup







Position Control with Echocardiography



- An accidental retrieval of the Impella is difficult to manage as the Impella tip is soft which prevents repositioning in most cases.
- A technique trying to keep the aortic cusps open with catheters and guide wires may be successful in order to facilitate a slipping of the Impella into the ventricle.
- A snare based technique (using a guiding catheter) to catch and actively push the Impella into the ventricle can be an additional solution in such a case.
- Although the IFU recommends a new positioning with the Impella-wire, some circumstances may require an immediate re-positioning attempt.