

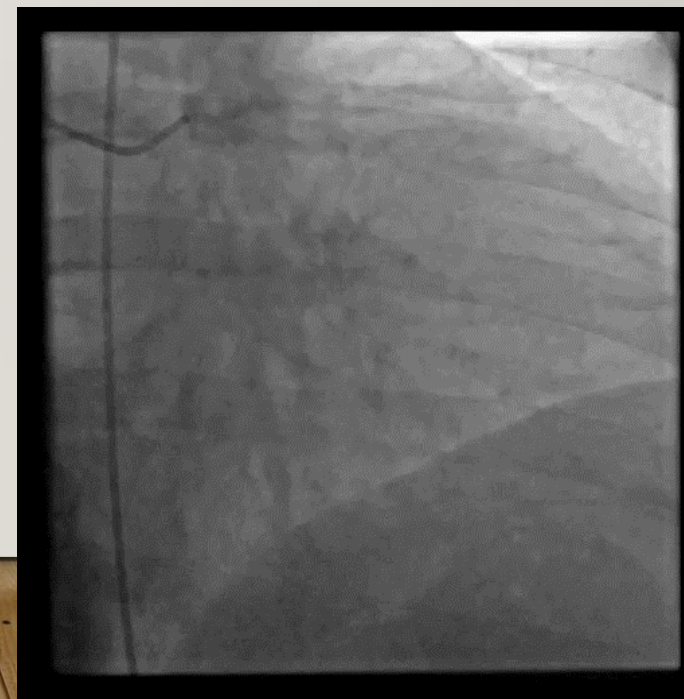
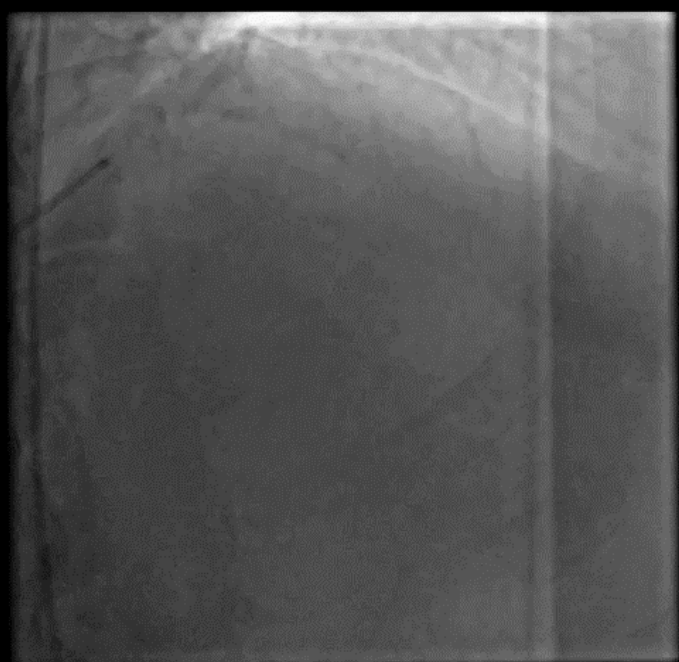
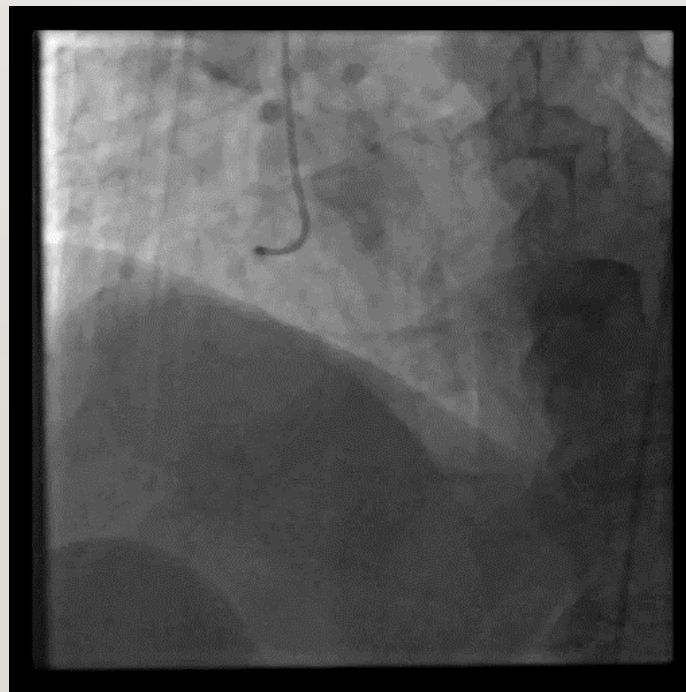
MY MOST MEMORABLE CHIP CASE IN 2019

DR CHAN KA CHUN ALAN
QUEEN ELIZABETH HOSPITAL
HONG KONG SAR

CASE HISTORY

- 55/M
- DM, HT, hyperlipidaemia
- End stage Renal Failure on Hemodialysis via left arm fistula
- ACS x3 since 2017 refuse intervention until late 2018
- Nuclear scan in 2018 showed large area of perfusion defect in anterior wall
- Echo in 2019; normal LV EF, no RWMA, no sig valvular lesion

CORO IN 2019



PROGRESS

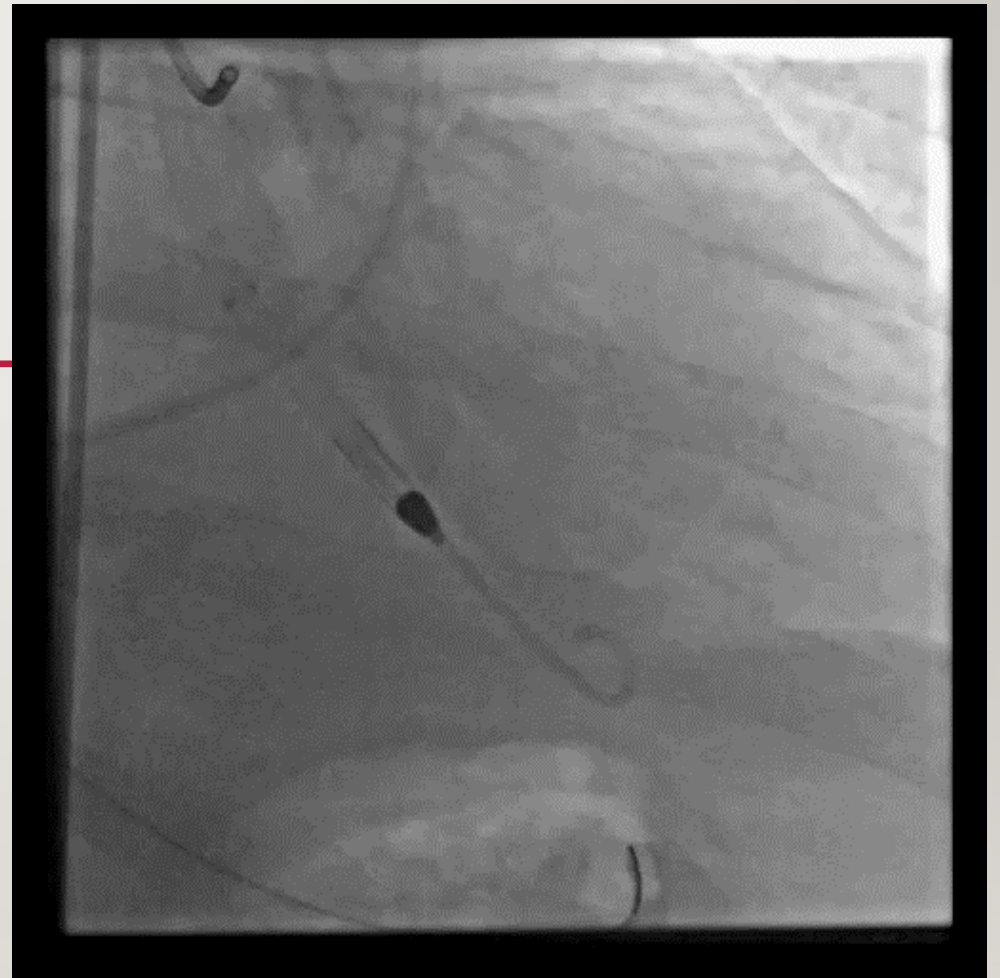
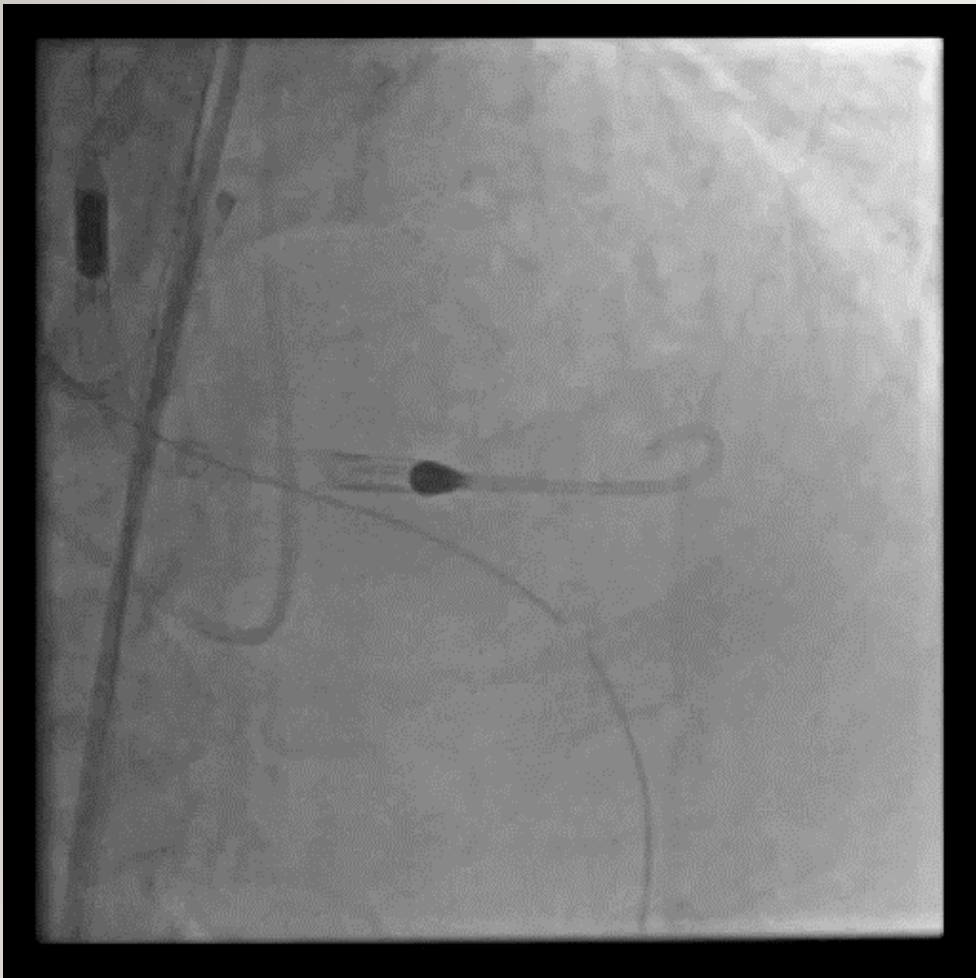
- Refer to surgeon for CABG.....
- Admit for NSTEMI and CHF
- Shortly developed PEA arrest and ROSC after 5mins of CPR
- lactic acidosis, cardiogenic shock and APO
- Intubated, Inotrope, IABP via L groin, CVVH via R groin
- Echo- EF 25-30% severe LAD territory hypokinetic, no sig MR
- Surgeon –not a surgical candidate as extreme surgical risk
- What next???

IMPELLA SUPPORTED HIGH RISK PCI IN CARDIOGENIC SHOCK

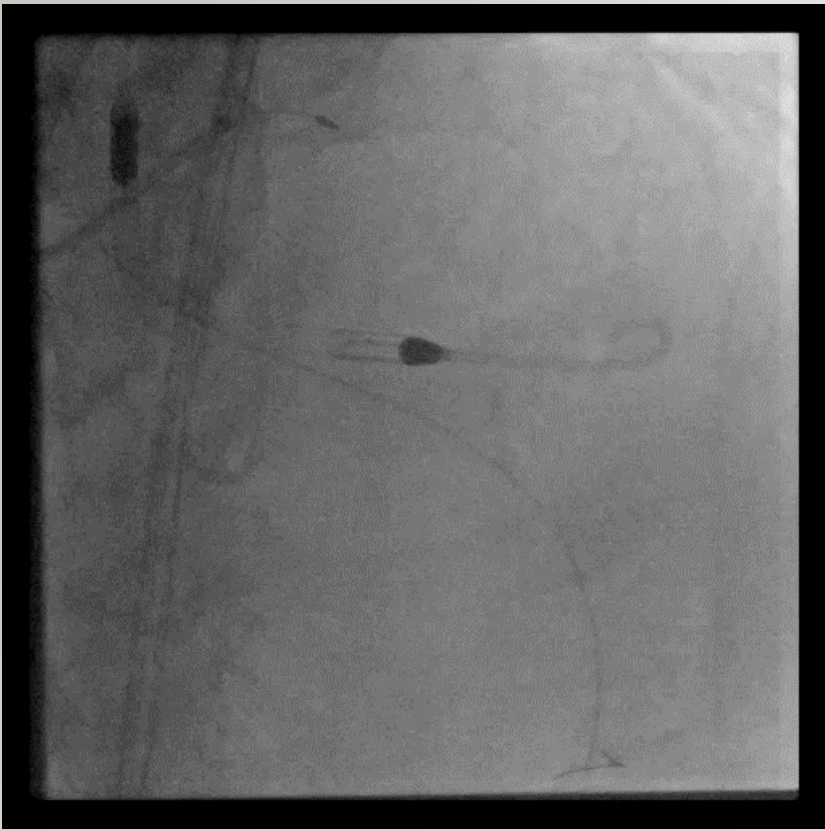


13FR DIALYSIS CATHETER- EXCHANGE TO 14FR SHEATH FOR IMPELLA CP





7fr EBU3.5 via LFA, RFV for Swan for PAP monitoring
RA 14, mPA 40, PCWP 30, PA sat 46%, AO sat 98%, CI 1.78(before Impella)
RA 10, mPA 36, PCWP 20, PA sat 58%, AO sat 98%, CI 2.26(After Impella)



-
- IVUS show sig con Ca in dIMn-oLAD, and fail to cross LCX
 - 1.5 burr rotablation
 - Fast AF/VT/shock
 - Defibrillation
 - NA push!

Same 1.5 burr to oLCX calcified lesion, rotafloppy GW



16000rpm



18000rpm

WHAT DO YOU NOTICE?

Guiding keep
pushing back

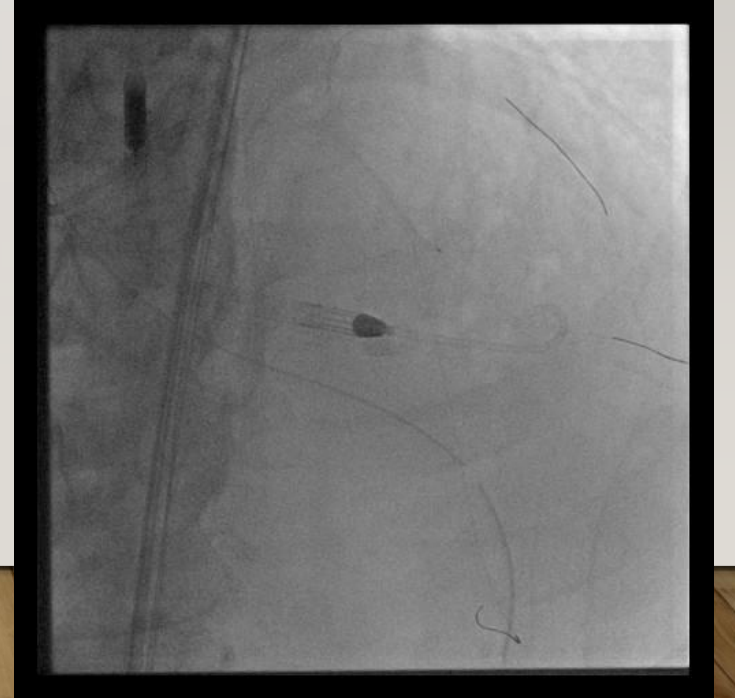


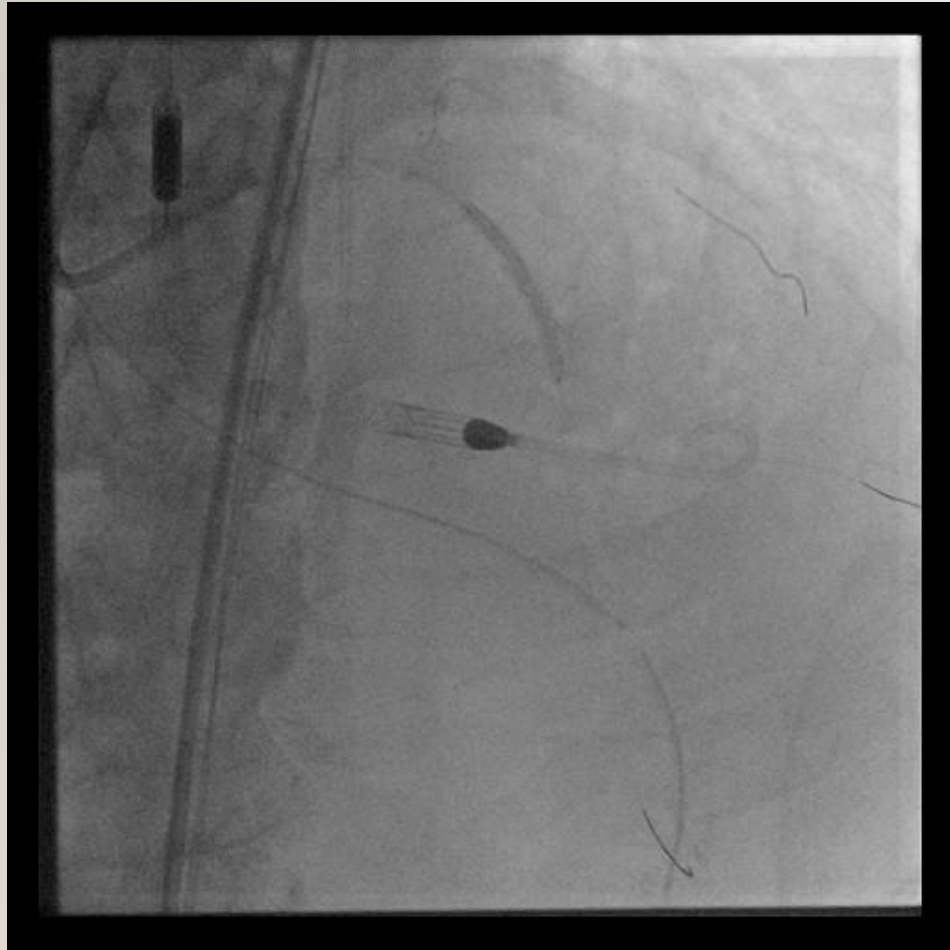
Guidewire keep
coming out

PARK ROTAFLOPPY GW AS DISTAL AS POSSIBLE VIA MC AND DEEP ENGAGEMENT OF GUIDING



- Again hypotension, VT
- Defibrillation again
- NA push!!



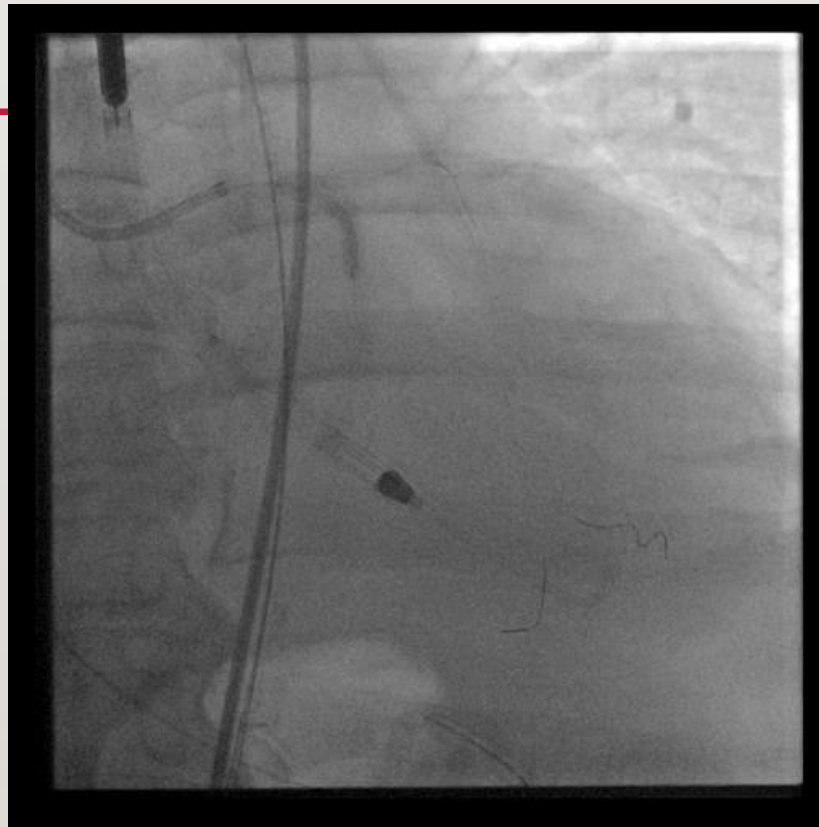


2.5 DES





2.5 Nc balloon



2.5 DES



POT with NC4.0

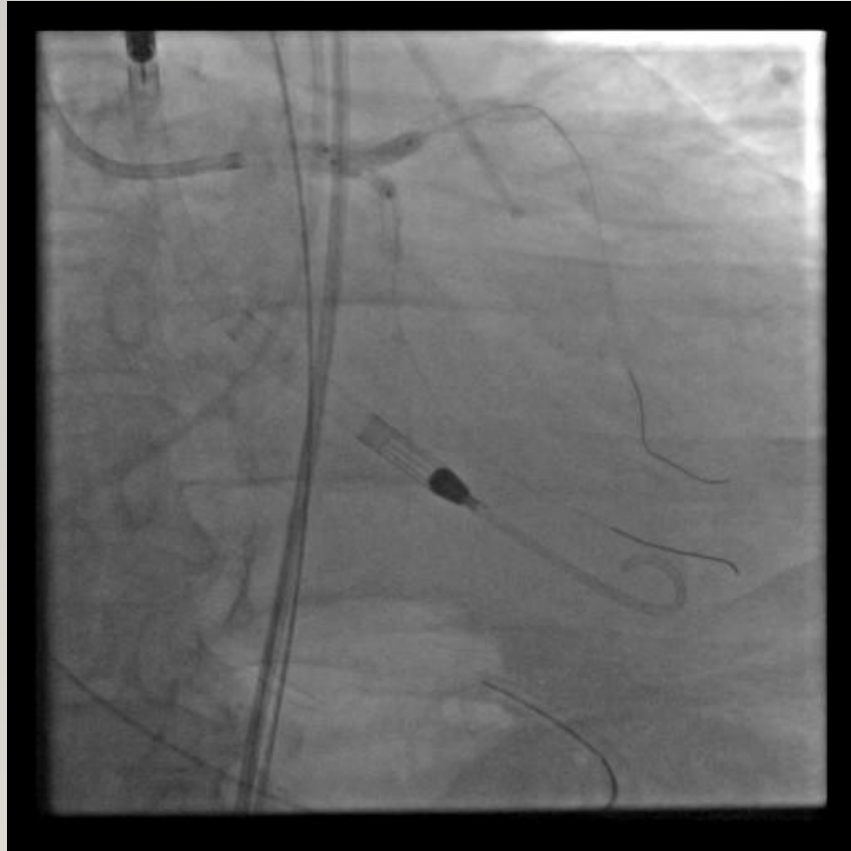
CULOTTE STENTING TECHNIQUE



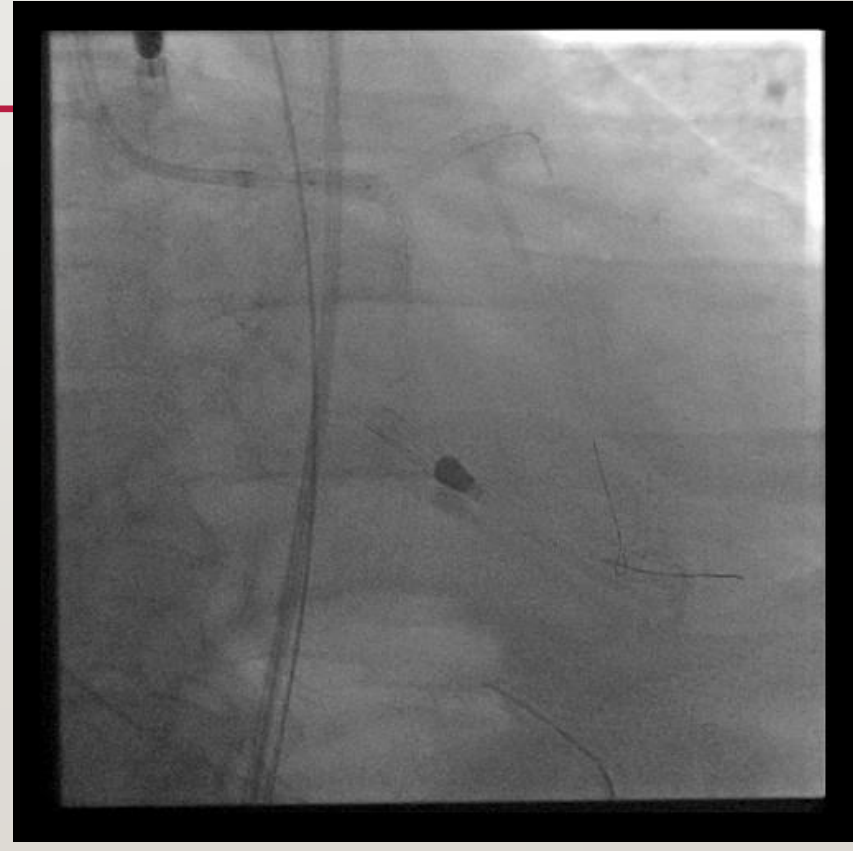
3.5 DES



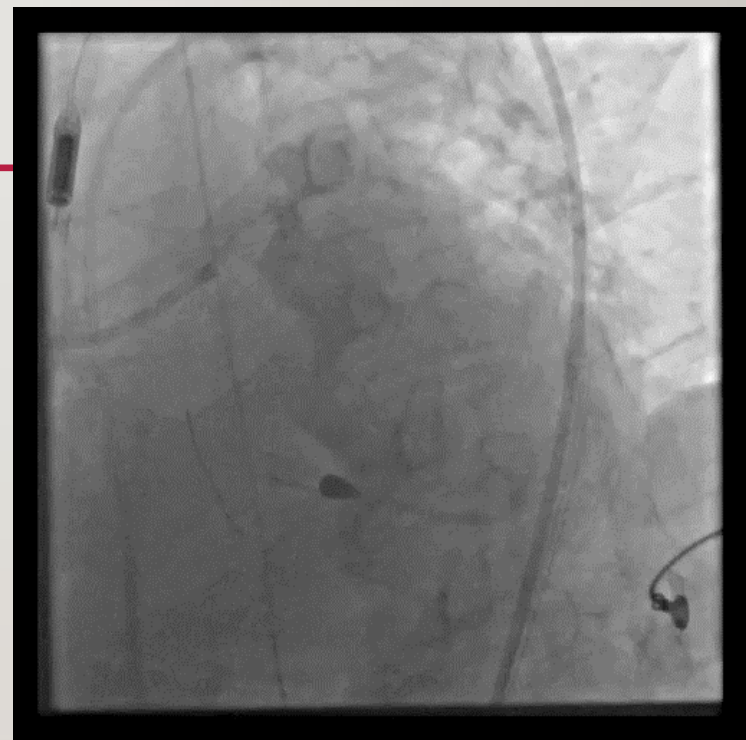
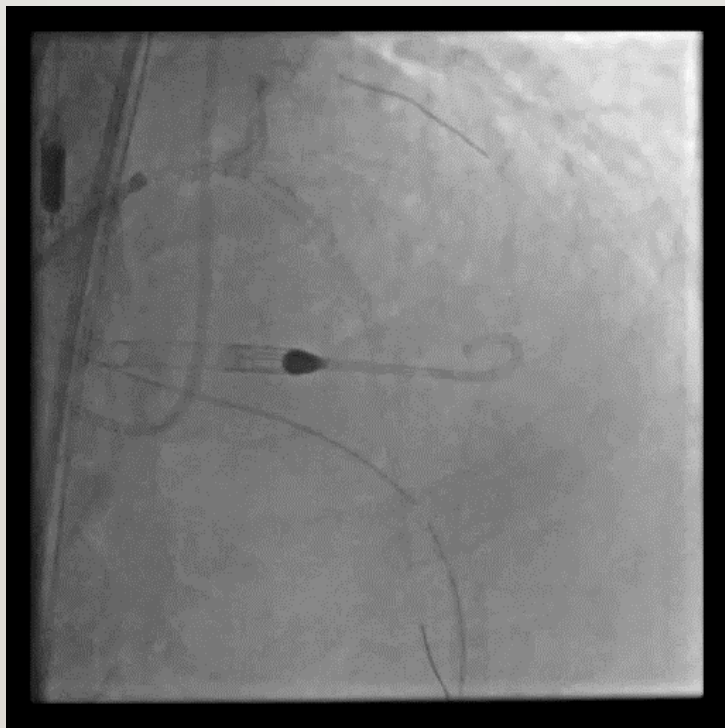
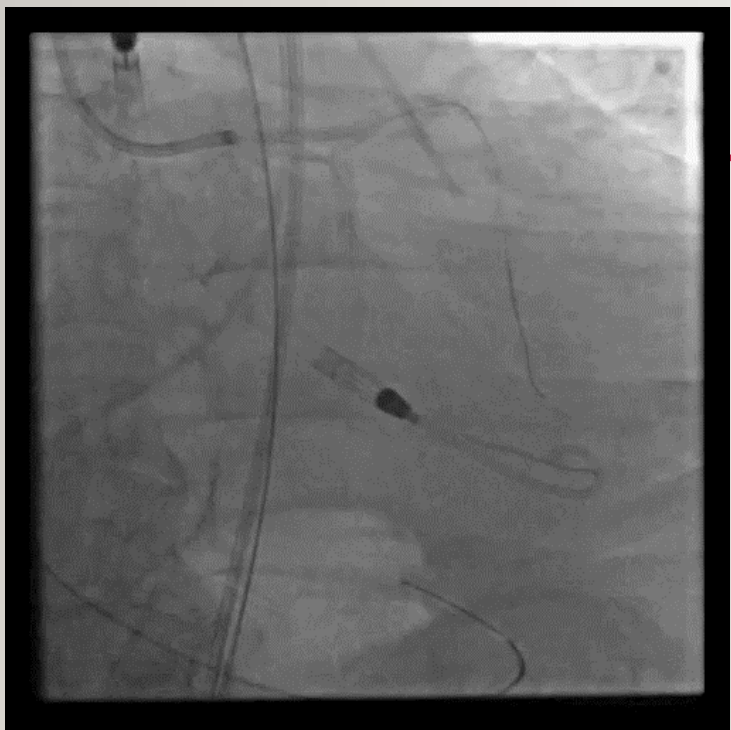
POT with NC 4.0



3.5/3.0 NC kissing



Final NC 4.0 POT



-
- Impella CP keep to CCU
 - RFV exchange back to HD catheter for subsequent CVVH
 - Impella left for one week , acidosis and fluid overload corrected with CVVH
 - Much stabilized and plan to remove Impella
 - But how?

REMEMBER RF ACCESS VIA SFA!!



-
- Vascular surgeon was consulted to close both RF and LF access (L groin AV fistula as well)
 - Engage in long EOT
 - Advice to try percutaneous method
 - Conservative mx for L AV fistula

Format: Abstract

Send to

J Invasive Cardiol. 2017 Jul;29(7):250-252. Epub 2017 May 15.

Novel Method for Exchange of Impella Circulatory Assist Catheter: The "Trojan Horse" Technique.

Phillips CT, Tamez H, Tu TM, Yeh RW, Pinto DS¹.

Author information

Abstract

Patients with an indwelling Impella may require escalation of hemodynamic support or exchange to another circulatory assistance platform. As such, preservation of vascular access is preferable in cases where anticoagulation cannot be discontinued or to facilitate exchange to an alternative catheter or closure device. Challenges exist in avoiding bleeding and loss of wire access in these situations. We describe a single-access "Trojan Horse" technique that minimizes bleeding while maintaining arterial access for rapid exchange of this percutaneous ventricular assist device.

PMID: 28570258

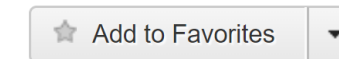
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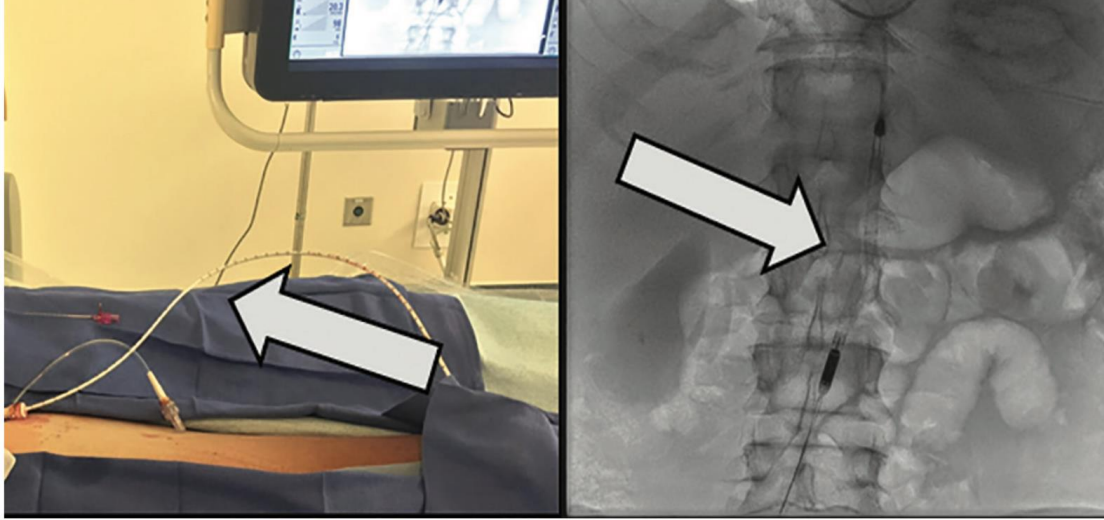


Figure 2. After the Impella is weaned off and disconnected from the console, the Impella is pulled back into the abdominal aorta (arrow).



Figure 4. The needle is withdrawn over the wire and removed.

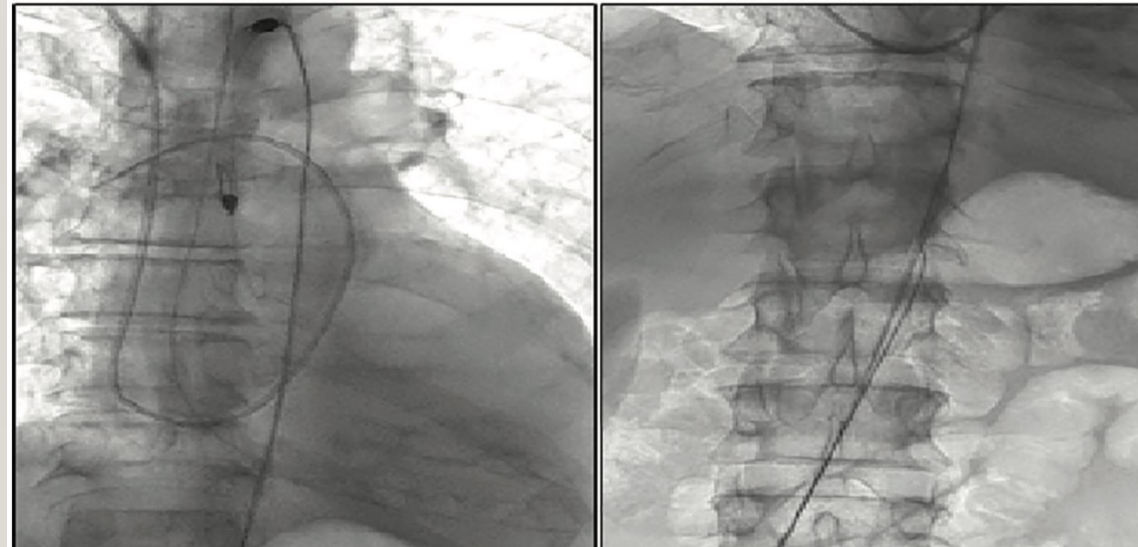
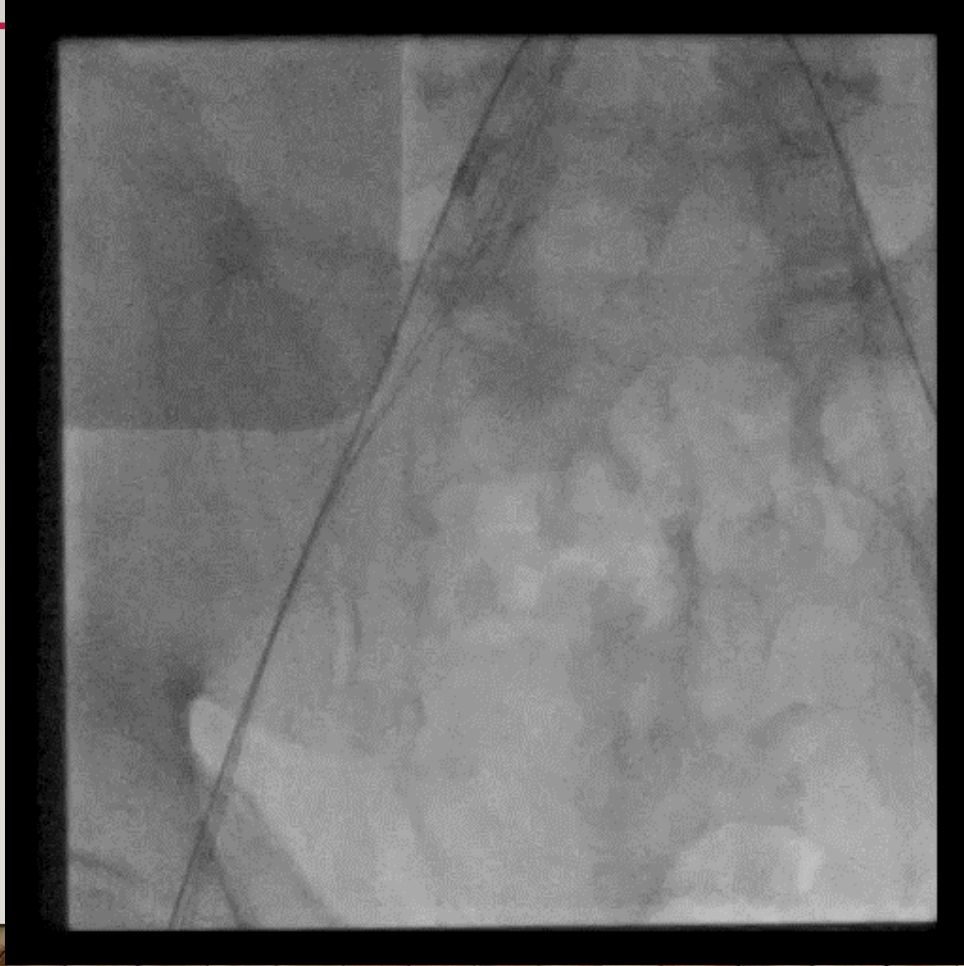


Figure 5. The Impella is pushed up into the ascending aorta, along with wire tip embedded in the Impella driveline, to the 65-70 cm mark, without re-crossing the aortic valve.

WHAT WE DID

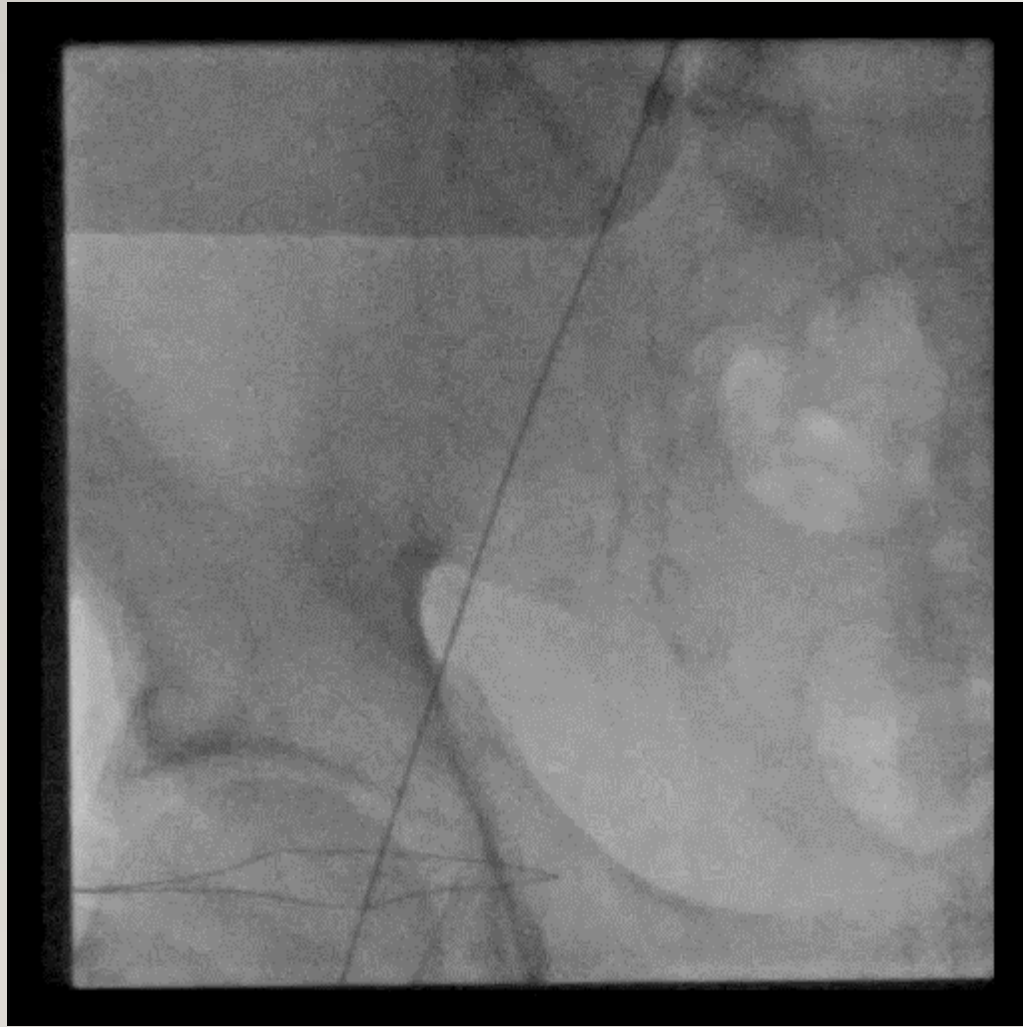




0.18in V -18 Guidewire



8mm peripheral balloon



-
- After one proglide and one angioseal
 - LFA close with one proglide

-
- Extubated few days later after stop sedation
 - Transfer out to general ward few days later
 - Continue regular HD via L arm AV fistula
 - Ongoing rehab for prolong hospitalization
 - FU echo recently show EF 30-35%, LAD territory severe HK

CONCLUSION

- Complex anatomy and complex patient history anticipated in all CHIP patient
- Challenging vascular access/closure is some patient
- Hemodynamic supportive device help to support high risk PCI and stabilized hemodynamic compromise in cardiogenic shock

Thank you!
Any Questions?

