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Abbott Northwestern Hospital

# 5 Things to Know About VA ECMO and Case Presentation

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# Disclosure

- No disclosures




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# Objectives

- Present and describe the use of VA ECMO in patient with Refractory Cardiogenic Shock caused by Acute Myocardial Infarction.





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## Case 1

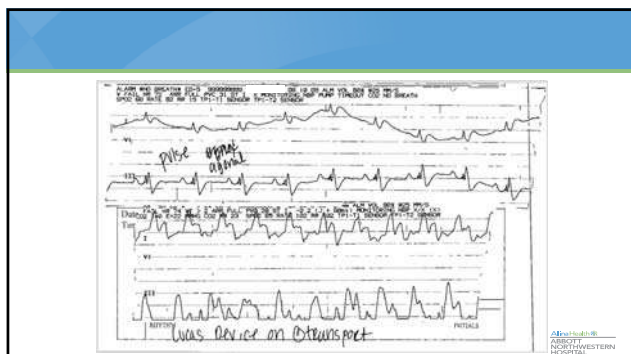
- 49 year old male no prior cardiac history.
- Very active. Playing Hockey with friends
- Drove himself to St. Francis Regional Medical Center.

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- Security staff saw the patient pulling in the emergency parking lot.
- Car hit the curb – wedge in the snowbank
- Found unresponsive with seizure-like activity. Security breaks the window and take him to the ER.

[illegible]



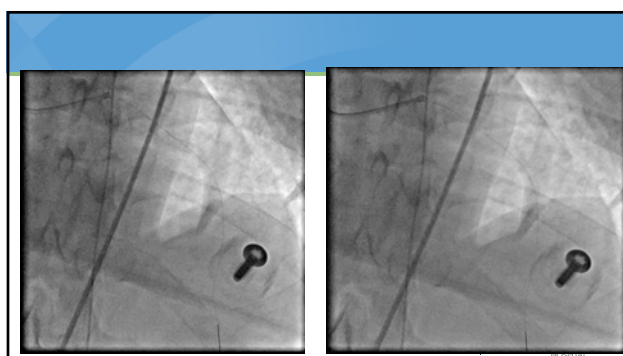
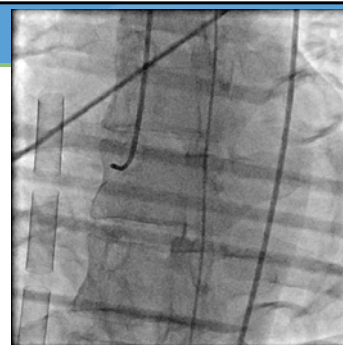
### St. Francis ED

- Ativan 1 mg for seizure
- K
- Ca Gluconate
- Amiodarone
- Epi
- Atropine
- Bicarb
- Magnesium
- ASA
- 8 shocks – Initial 200 J and subsequent at 300J
- Immediate transfer to Abbott for VA ECMO.



### In the Cath Lab

- On arrival: Lucas in place. BP 90 systolic
  - Intubated, mildly sedated
  - Cool and clammy extremities
- Decision was to proceed with VA ECMO cannulation first
  - A Left femoral artery (17F)
  - V Right femoral vein (25F)
- IABP in Right femoral artery



### Successful Thrombectomy



### In the Cath Lab

- ASA, Ticagrelor loading dose
- Cangrelor load and infusion given.
- Vascular surgery called in the room.
  - Pt not properly sedated
- Hemodynamics
 

– AO 86/60 – 67	- Pump flow: 3.29 LPM
– Wedge: 18	- Sweep flow: 2.5 LPM
– CVP: 12	- PA Sat: 84.6
– CO/CI: 10.55/5.48	

### Hospital Course

- Meeting with the wife.
- Echo with limited views on ECMO and EF of 10-20%.
- AKI
- Shock liver
- Dobutamine, Dopamine to enhance LV ejection fraction (PP was 15-20)

### Follow up

- 48 hours post-event he was successfully decanulated.
- Following commands
- Renal function improving, liver function improving
- Troponin peak at 220
- Telemetry floor in 5 days

### Outpatient

- AHF bridge clinic
- EF 45-50%
- Appropriate guideline-directed medical therapy.

Thank you!



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