

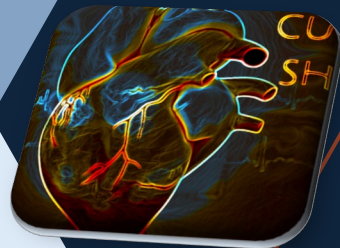


Cardiogenic Shock: A Miracle Patient

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St. Dominic's



The Background

- A 70-year-old white male has a witnessed outside hospital cardiac arrest while playing tennis
 - No past medical history or present medications
- EMS reports the patient was pulseless with agonal breathing for several minutes
 - AED was applied
 - CPR initiated
 - Single shock administered for wide complex tachycardiac, possibly Torsades
 - No intubation required





Arrival to St. Dominic's Emergency Department

Cardiogenic Shock: Miracle Patient

EKG: SR with
RBBB, Left Axis
Deviation,
Questionable
Prior Inferior MI

HR: 96
BP: 184/96
RR: 22

Awake, confused,
global amnesia

Denies CP

Decision to take
to Cath Lab to
r/o ischemia

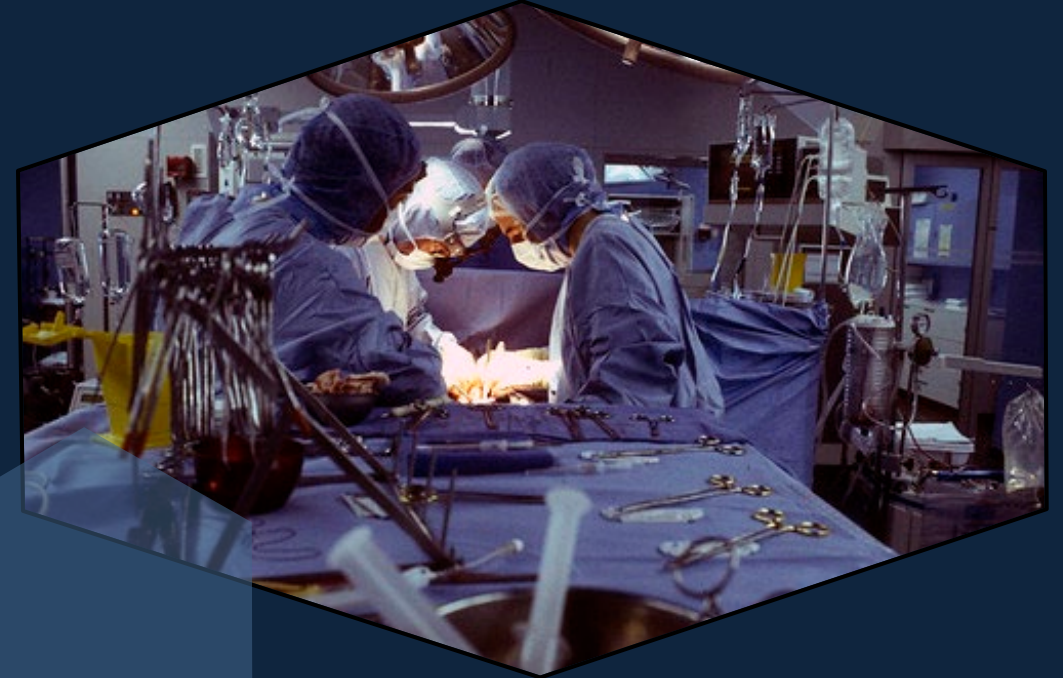
A decorative graphic on the left side of the slide consists of several hexagons. There is a large orange hexagon in the center, a light blue hexagon above it, a white outline hexagon to its left, and a smaller orange hexagon below it.

Cardiac Cath Lab Findings

- **Multivessel CAD**
 - Proximally Occluded Left Circumflex
 - Ostial Occluded RCA
 - Critical Ostial Diagonal
- **Not Amenable to PCI**
- **Consult CV Surgery for Possible CABG**
- **Ejection Fraction: 25%**

CV Surgery (48 hours Post OHCA Event)

- CABG x 3
 - LIMA to LAD, SVG to OM1, SVG to OM2
 - Severe intraoperative vasoplegia following initial separation from cardiopulmonary bypass
 - Continued to develop progressive hypotension resistant to vasopressor support
 - ECMO support?
 - Left ventricular support device?



Left Ventricular Support Device

Indications:

- Cardiogenic shock immediately (< 48 hours) following acute myocardial infarction or open heart surgery
- Persistent hypotension >30 minutes and unresponsive to optimal medical management and conventional treatment

Course of Action:

- 3.5 CP Impella inserted by interventional cardiology and cath lab team via RCFA
- Immediate stabilization of BP allowed flow rate to be reduced from 3.5 L/min to 2.5 L/min



Post- Op Events

24 hours

Renal Insufficiency

Encephalopathy

Continued post-op
supportive care

48 Hours

Extubated

Left Ventricular Assist
Device removed

EF improved to 45%
per Echo

Days 4-5

Post-Op Afib with
RVR

Pleural effusion, s/p
thoracentesis

Day 12:
Discharge

EF 45%

Plavix, Beta Blocker,
Statin, ASA,
Amiodarone

Home PT/OT

Swing Bed

Post Discharge



Return to Hospital

- Shortness of breath with bilateral lower extremity edema
- Pulmonary edema and moderate left pleural effusion
- Thoracentesis and diuretic therapy
- Acute on chronic heart failure



CHF Clinic Referral

- Timely management of CHF by a specialized CHF team



Jackson Heart Clinic: Two Month Follow-Up

- No dyspnea, orthopnea, irregular heartbeat, edema
- Now at home
- Exercising
- Medication therapy includes: Beta-blocker, loop diuretic, and antiplatelet

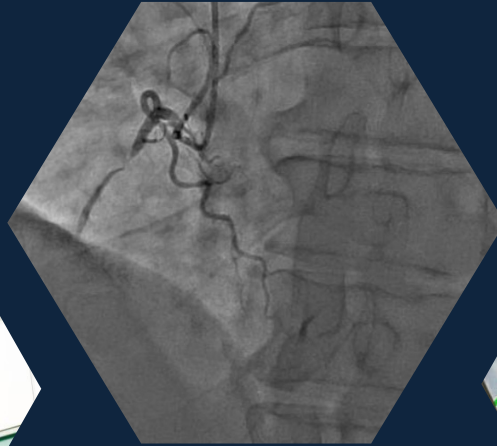
Collaboration



EMS



Emergency
Department



Interventional
Cardiology



CV Surgery



Discharge Care

Questions?

