Case Presentation- Refractory Primary VF Arrest

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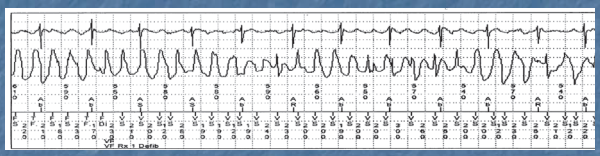
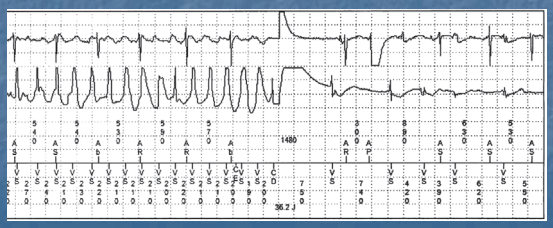
CIVA

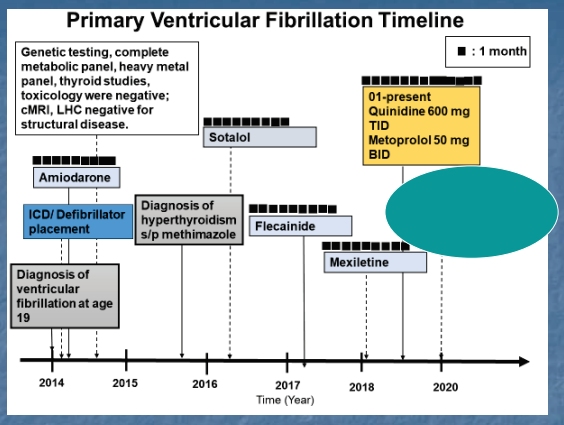


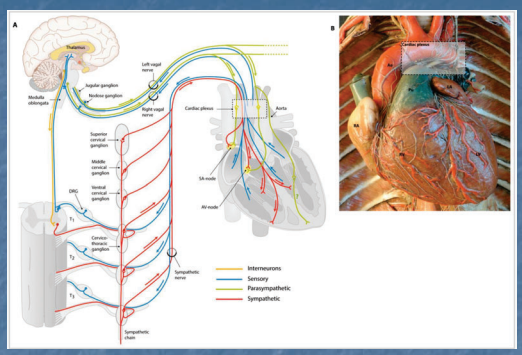


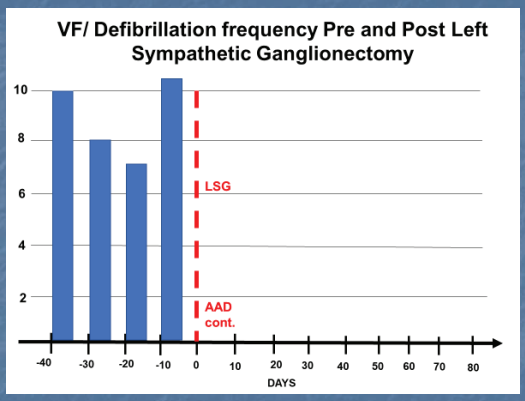
Case Presentation

- A 22-year-old morbidly obese man, with a BMI of 51.7 kg/m2, metabolic syndrome, hyperthyroidism (euthyroid on methimazole), and ventricular fibrillation (VF) arrest status post ICD at Children's Hospital at 16 years of age
- He has been on amiodarone for suppression of VF
- No family history of sudden cardiac death
- Normal Cardiac MRI and Echo, Negative cardiac catheterization (bridging/ anomalous coronaries), Negative genetic studies for Long QT/ Short QT/ Brugada's/ Catecholaminergic Polymorphic VT/ ARVD

TREATMENT OPTIONS







LEFT SYMPATHETIC GANGLIONECTOMY FOR REFRACTORY PRIMARY VENTRICULAR FIBRILLATION ARREST OF UNKNOWN ETIOLOGY IN A YOUNG MALEFREE ACCESS
FIT Clinical Decision Making
Yogamaya Mantha, Rakushumimarika Harada, Michinari Hieda, and Brian D. Le
JACC. 2020 Mar, 75 (11_Supplement_1) 2840

"When Death Is Not An End"

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Texas Health Heart and Vascular Specialist

55 Yo male, transferred from outside facility

➢STEMI

➢Cardiogenic Shock

➢Culprit was RCA, Circumflex is anomalous and aneurysmal, LAD is aneurysmal

➢RCA dissected, did not intervene on Circ and LAD was only remaining vessel.

✓Impella CP in place

✓EF 10% ish

✓Recurrent Ventricular Tachycardia

✓Lactic Acid 5.5

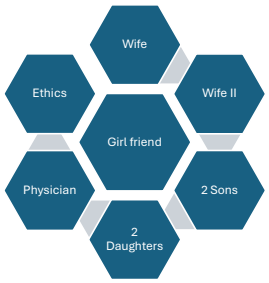
✓Anuric

✓Multi Organ Failure

- Shock Protocol initiated
- Switched to Impella 5.5
- Some stabilization, some not
- Recurrent VT
- Trip back to Cath Lab
- Fixed Circumflex
- LAD was non obstructive

Who should have decision making capacity

- Wife
- Wife II
- Girl Friend III



Cardiac Arrest

↓

Pronounced Dead

↓

Family informed

Who Do You Inform

- Wife
- Wife II
- Girl Friend III

Miracle Do Happen

He starts breathing again

De-Pronounced ??

WHATS NEXT

- How aggressive we want to be at this stage ?
- Is there any merit to involving ethics ?
- When its okay to say NO

D.K.

Jehovah's Witness

D.K.

- Admitted from the ER 5/8/24 with HTN episode and palpitations
- 58 year old female with HTN, GERD
- Found to have a large ascending aortic aneurysm
- Admitted for BP control and CTS consult

D.K.

- Given the size of her aorta, it was determined that she would need ascending aorta replacement
- This would also require circulatory arrest
- She mentions she is a Jehovah's witness

D.K.

- What are the surgical concerns associated with cardiac surgery and Jehovah's Witness
- Long discussion between the surgeon and patient
- She was declined for surgery

D.K.

- She changes her mind and agrees to surgery
- But DO NOT tell my family that I will accept blood transfusions

D.K.

- Surgery goes well
  - No blood transfusions
- She is extubated appropriately and has transfer orders to the floor
- POD #3 she arrests

D.K.

- Her arrest requires immediate placement of VA ECMO
- Patient hypotensive with difficulty with flows on ECMO
- Taken to OR with Gen Surg for X-lap and found to have large amount of bleeding due to spleen/liver lacs
- Patient cannot consent for her own blood transfusions at this time
  - Only the family can
  - The family are also devout Jehovah's Witnesses

D.K.

- Has a very prolonged course at this time
- Multiple transfusions, operations, high dose pressors – over two weeks after CPR
- No neurological fxn, blackened toes, fingers
- Physicians recommend withdrawal of care
  - Family says no
  - Eventually heart loses electrical activity, no pulse, and she sadly passes