Refactory V-Fib/Pulseless V-Tach
Mills Peninsula Pilot Program

**History**
- Events leading to arrest
- Estimated downtime
- Prior resuscitation attempts
- Past medical history
- Medications
- Known terminal illness

**Signs and Symptoms**
- Pulseless
- Apneic

**Differential**
- Medical vs. trauma
- VF vs. pulseless VT
- Asystole
- PEA
- Primary cardiac event vs. respiratory arrest or drug overdose

**Enter from Cardiac Arrest**

- **V-Fib or pulseless V-Tach**
  - Defibrillation 200J
    - Resume high quality chest compressions
    - Change compressors every 2 minutes
    - Establish IV/IO
  - Defibrillation 300J
    - Resume high quality chest compressions
    - Change compressors every 2 minutes
  - Defibrillation 360J
    - Resume high quality chest compressions
    - Change compressors every 2 minutes
    - If V-Fib/Pulseless V-Tach is refractory after 3 shocks
      - Continue high performance CPR and give medications during compressions
      - Epinephrine (1:10,000)
        - 3 mg max
      - Lidocaine
        - Refer to Adult Drug Card
    - Persistent V. fib/V-tach AND phone call made
      - If in Mills-Peninsula catchment area, begin transport to Mills Peninsula Hospital
        - (Go to Pg. 2)
  - Yes
  - AT ANY TIME
    - Return of spontaneous circulation
    - Go to Post Resuscitation TP

- **Exit to Mechanical Device Field Procedure**

  - Consider Criteria for EMS Transport for Emergent ECMO:
    - 18 – 75 years of age
    - Body morphology able to accommodate automatic CPR device.
    - Mills-Pen as receiving facility

  - After Second Shock:
    - Notify on-call Shock Physician
      - 669-273-3284
    - Mechanical CPR device applied
    - Continue ACLS (limit 3 mg Epi), defibrillation PRN in route

**INFORMATION FOR ON-CALL SHOCK CONTACT**
- Witnessed or unwitnessed?
- Bystander CPR or no bystander CPR?
- Downtime?
- Age?
- ROSC at any time?
- Trauma?
- Co-morbidities?
- Body size (ok for LUCAS device?)

**Exit to Cardiac Arrest**

Effective November 2018
Treatment Protocol CA03T
Page 1 of 2
Effective March 2019
San Mateo County Emergency Medical Services

Refractory V-Fib/Pulseless V-Tach
Mills Peninsula Pilot Program

Mills Peninsula Hospital
(From Pg. 1)

On-Call Shock Doc
- Receives call from field crew to activate SHOCK Team: Interventional Cardiologist, Cath Lab Team, IR Tech, Echo Tech, Perfusionist, Operator
- Operator Notifies: House Supervisor, Admitting for pre-registration

Patient Arrival

Cath Lab Ready

Patient Boards in ED

Direct to Cardiac Cath Lab
- Arterial and Venous Access under US
- Measure ABG and Serum Lactate

Cath Lab Initial Assessment:
Determine CCL Resuscitation Discontinuation Criteria:
- ET CO2 < 10 mmHg
- PA O2 < 50 mmHg
- Serum Lactate > 18 mmol/L

*If ≥ 1 criteria met and NO ROSC – declare patient dead

ROSC Present?

- Yes
  - Immediate Coronary Angiogram
  - Hemodynamic Support as needed

- No
  - 21F Venous + 16F Arterial Cannulas in Opposite Groins
  - Initiate ECMO