

AC06 Adult Ventricular Fibrillation & Pulseless Ventricular Tachycardia

Objectives:

- Early appropriate recognition and management of Ventricular fibrillation or Pulseless Ventricular Tachycardia
- Recognition of poor perfusion attributed to a Ventricular fibrillation or Pulseless Ventricular Tachycardia

General Information:

- Continuous effective CPR is the foundation for pulseless rhythms and should never be compromised (see Emergency Cardiac Care protocol)
- Lidocaine should be used for endotracheal administration
- Magnesium Sulfate is the antiarrhythmic of choice for torsades de pointes
 - a) 2 gms in 10 ml NS over 5 minutes (standing orders for I and P)
- Second line antiarrhythmic (standing order I and P)
 - a) Lidocaine dose 1 -1.5 mg/kg, repeated at 0.5 – 0.75 mg/kg up to maximum dose of 3 mg/kg
 - b) Magnesium Sulfate dose 2 gms in 10 ml NS over 5 minutes
- When using a monophasic device, defibrillate at 360 joules
- When using a biphasic device, follow manufacturer guidelines for energy settings or if unknown defibrillate at 200 joules
- Endotracheal administration of medications should be used only when IV /IO access not available (dose 2 – 2.5 times IV dose)
- If patient regains a pulse, refer to Post Resuscitation protocol
- For cardiac arrest in renal patients administer Calcium Chloride 1 gm IV/IO push followed by 40 ml flush, Sodium Bicarbonate 1 Meq/kg and repeat in 10 minutes if no change and medications are available



Warnings/Alerts:

- Do not give Amiodorone via the endotracheal tube
- It is the responsibility of the provider delivering the shock to ensure that no one is touching the patient prior to shock delivery
- The following conditions need to be addressed prior to defibrillation
 - a) Patients in standing water
 - b) Patients with transdermal medications
- CPR may still be required in the presence of an organized cardiac rhythm

OMD Notes:

- Magnesium Sulfate should be given over 5 minutes in emergent situations

References:

AHA 2005 ACLS pgs 40-50

Performance Indicators:

Onset of arrest time

Time of Initial Defibrillation

Patient Packaging

Initial rhythm

Confirmation of Airway

Patient Disposition

Bystander/FR CPR/AED

Consistency of CPR

Treatment per the Emergency Cardiac
Care and
Airway/Oxygenation/Ventilation
Protocols

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