7.19 SYNCHRONIZED CARDIOVERSION

INDICATIONS

Adults: **2.08 Dysrhythmia: Tachycardia**

Persistent tachycardia typically >150 bpm, causing one or more of the following hemodynamically unstable conditions: Altered mental status, hypotension (systolic <90mmHg, signs or shock, ischemic chest discomfort, shortness of breath, or pulmonary edema likely due to the arrythmia.

Pediatric: **8.04 Pediatric Dysrhythmia: Tachycardia**

Persistent tachycardia typically >220 bpm (infants), >180 bpm (child) for narrow complex and >120 in infants and children for wide complex tachycardias.

CONTRAINDICATIONS

None

PROCEDURE

1. Place pads in anterior/lateral position. If unable or patient has pre-existing implanted device such as pacemaker or AICDs, place pads anterior/posterior position.
2. Attach cables to the monitor.
3. Select "Sync" button on monitor.
  a) Monitor will be in "sync" when sync cursor is above each R wave
4. Select energy level.
5.Charge monitor.
6. "Clear" team members and equipment (e.g Oxygen tank, monitor etc.) from patient.
7. Press and hold "shock" button until shock is delivered.
8. If patient needs additional cardioversion ensure "sync" button is on as some monitors will default to turn the "sync" feature off after each cardioversion.

As a general guideline:

Adults:

a) Narrow QRS and regular: start at 70J*
b) Narrow QRS and irregular: start at 120J*
c) Wide QRS and regular: start at 100J*
d) Wide QRS and irregular: attempt to sync, if unable, defibrillate: 120J*
  ***** *Increase in step wise fashion if previous shocks are ineffective*

Pediatric:

a) Begin with 0.5-1J/kg.
b) If previous cardioversion is ineffective subsequent doses at 2J/kg.
c) Refer to length-based resuscitation tape for weight approximation.

CONSIDERATIONS

A. Strongly consider **Midazolam** prior to cardioversion. Do not delay Midazolam to start an IV.
B. Midazolam is not contraindicated if SBP is < 90 if used for pre-procedural sedation.
C. Cardioversion is safe in pregnant patients.
D. Remove medication patches or place pads to assure pads are not over patches.