Synchronized Cardioversion

Effective: 03/01/2022
Supersedes: N/A

Approved Provider: Paramedic

Reference Protocols: Dysrhythmia

Indications

- Unstable Tachydysrhythmia as defined below and in dysrhythmia protocol
  - Severe Decreased LOC. GCS Less than 8
  - Hypotension
  - Cardiogenic shock due to dysrhythmia
  - Last step in treatment algorhythm as indicated by dysrhythmia protocol

Precautions

- Cardioversion is not the initial step in treatment unless above indications are met
- Appropriate BLS and ALS maneuvers, as mandated by protocol, should be carried out first unless above indications are met.

Contraindications

- Pulseless Patients
- Apneic Patients

Procedure (Fig. 1)

- Connect ECG electrodes to patient in standard positions (synchronization will not occur without ECG monitor in place)
- Clean and dry chest. Remove excess hair if necessary to obtain optimal electrode to skin contact.
- Connect fast patches to matching cable
- Apply fast patches to patient's chest as described below:
  - Anterior-Posterior ***preferred*** (Fig. 1)
    - Apply one electrode left anterior chest halfway between the xiphoid process and left nipple, with the upper edge of the electrode below the nipple line.
    - Place the other electrode on left posterior chest beneath the scapula and lateral to the spine
  - Anterior-Anterior *only used when anterior- posterior is not able to be completed*
    - Place the positive patch (with the heart on it) on the left side of the chest, midaxillary over the fourth intercostal space.
    - Place the negative electrode on the right chest, sub clavicular area.
- Push the "SYNCH" button.
  - Insure that each QRS complex is being sensed. Sensing marks will appear on screen and on print out.
- Set appropriate energy setting.
  - **Narrow/Regular:** 50J - 100J - 150J
  - **Narrow/Irregular:** 120J – 150J – 200J
  - **Wide/ Regular:** 120J – 150J – 200J
  - **Wide/ Irregular:** *Defib* 120J – 150J – 200J

Procedure (cont.)

- Ensure nobody is touching the patient.
- Push and hold the "SHOCK" button. Hold until the energy is delivered.
- Repeat as necessary and monitor patient for improvement or deterioration.

Documentation

- Indications for procedure.
- Energy required for conversion.
- Response to intervention.

Notes

- Fast patches may be placed on the stable tachycardic patient but should not be used unless the patient deteriorates.

Fig. 1