Advanced Cardiovascular Life Support
Learning Station Outline

Electrical Therapy

The Electrical Therapy station is a 30 minute rotation consisting of combined cardiovascular and electrical therapy related content. This station will consist of 3 sections and integrates clinical knowledge, simulation and hands-on practice.

At the end of this section students should be able to:

- Identify life-threatening ECG rhythms/arrhythmias;
- Identify proper locations for application of ECG leads and multi-function pads;
- Demonstrate Synchronized Cardioversion with emphasis on varied energy levels, pathway to and application of the “Sync” soft key, purpose of synchronizing to R-wave, as well as safe and timely shock delivery;
- Demonstrate manual defibrillation with emphasis on appropriate energy levels, charging and clearing, as well as safe and timely shock delivery; and
- Demonstrate Transcutaneous Pacing with emphasis on A/P pad placement as well as verification of mechanical and electrical capture. Point out location of 4:1 button and how it applies to external pacing;

A. Technology Review
   1. Instructors should first conduct an in-depth review of the Zoll R-Series CCT Monitor, incorporating the Monitor function, Defibrillation function, Transcutaneous Pacing Function and Synchronized Cardioversion function.
      **Note** Instructors may utilize the “Zoll R-Series Technology Review Guide” found in the station specific binder.

   2. Upon conclusion of this section students should have a basic understanding of monitor related functions, as they will receive hands-on electrical therapy skills later in the station.

B. Rhythm Disturbances
   1. Instructors should review the basics of rhythm identification (i.e. rate, regularity, QRS duration and P-wave identification) and review the following rhythms related to ACLS cardiac algorithms:

      - Regular Sinus Rhythm;
      - Sinus Tachycardia;
      - Sinus Bradycardia;
Advanced Cardiovascular Life Support
Learning Station Outline

- Tachyarrhythmias (Narrow Complex);
- Tachyarrhythmias (Wide Complex);
- Ventricular Fibrillation (VF);
- Pulseless Electrical Activity;
- Pulseless Ventricular Tachycardia (VT); and
- Asystole

C. Electrical Therapy Hands-On Practice

1. It is recommended that this section be performed in a basic (short) scenario format while allowing ample time for students to receive hands-on practice. Instructors should provide students with short scenarios (i.e. VF/ Pulseless VT, Bradycardia, Tachycardia) and allow students, in groups of 1 or 2 demonstrate electrical therapy related interventions.