

AUTOMATIC IMPLANTABLE CARDIO-DEFIBRILLATOR (AICD) DEACTIVATION

Only paramedics that have been trained in the AICD deactivation procedure may perform the skill. A direct on-line medical control order is required to perform this skill.

An AICD is an implanted defibrillator device that consists of a lead system that senses cardiac activity, logic circuitry to analyze the sensed signals, a power supply for device function and generating high voltage, and a capacitor that stores and delivers shocks when needed when brady and/or tachyarrhythmias are detected within programmed parameters. These devices may malfunction occasionally.

INDICATIONS:

For verified frequent and recurrent inappropriate AICD discharges, a magnet may be utilized to deactivate “runaway” devices. Inhibition of AICD devices should be considered only when continuous ECG monitoring with ACLS is readily available and there is evidence of device malfunction.

PROCEDURE:

- A. Contact on-line medical control
- B. Monitor ECG and verify “triggering” rhythm AND inappropriate defibrillator discharge.
- C. Identify the location of the AICD device.
- D. Place donut magnet directly over the AICD device
- E. After defibrillator deactivation, tape magnet firmly in place and transport.
- F. Treat underlying rhythm per ACLS protocols.

PRECAUTIONS:

- A. It is very important to make the correct diagnosis before utilizing this protocol (ECG showing “triggering” rhythm and indications of recurrent AICD discharges).
- B. Some AICD devices will emit varying beeping or continuous tones when magnets are applied, others will not. Disregard these tones.
- C. If the magnet placement is successful in overriding the pulse generation of an AICD, DO NOT REMOVE THE MAGNET. Some units will return to operational activity after removal of the magnetic field.

SPECIAL CONSIDERATIONS:

- A. Magnets should be stored so as not to come in contact with magnetic sensitive materials, i.e., tapes, credit cards, magnetic door entry cards and other electronic equipment.
- B. A small percentage of AICDs are impervious to magnetic fields (AICD recipients who work around magnetic fields have these special units) and will not be deactivated with the doughnut magnet. In such cases, advise on-line medical control and transport.
- C. Consider the use of the AICD magnet in deactivating cardiac pacemaker malfunctions.
- D. Identification information of the AICD type, date implanted and location of implantation (location of device usually indicated on a wallet card) should accompany the patient to the emergency department.