REGION I EMERGENCY MEDICAL SERVICES
STANDING MEDICAL ORDERS
EMT – Basic

SMO: Automatic Implantable Cardiac Defibrillator (AICD)

Overview: The AICD functions by monitoring the patient's cardiac rhythm, rate, and QRS morphology. When a monitored ventricular rate exceeds the preprogrammed rate for more than 10 seconds, the AICD delivers a shock of about 6 to 30 joules to restore a normal sinus rhythm. If the defibrillation does not restore a normal sinus rhythm, the AICD will charge again and deliver up to four additional shocks. A complete sequence of five shocks, if required, may take up to 2 minutes. Once a slower rhythm is restored for at least 35 seconds, the device can deliver another series of up to five shocks if VT or VF recurs.

Personnel in contact with the patient at the time of AICD firing will receive a shock of approximately 3 joules. This energy level constitutes NO DANGER to pre-hospital personnel. (May feel a slight tingling.)

INFORMATION NEEDED
__ How many shocks the patient has received/sensed.

OBJECTIVE FINDINGS
__ Patient reports multiple shocks from AICD
__ Slight tingle felt by Provider when AICD is firing

TREATMENT
__ Routine Cardiac Care
__ Oxygen at 100 % via NRB mask
__ Treat dysrhythmias per SOP's with the following exceptions:
- Avoid direct placement of the defib pad over the AICD unit as this could damage the unit. Normal placement of the AICD is in the LUQ of the abdomen.

__ Any patient who has been shocked by his/her AICD should be strongly encouraged to seek medical attention regardless of the patient's current condition.
__ Notify Medical Control EARLY to enable them to get magnet ready to deactivate AICD.

Documentation of adherence to protocol:

__ Report of patient's complaint and number of times patient reports AICD firing
__ Additional treatment as needed per cardiac rhythm

Medical Control Contact Criteria
__ Contact Medical Control for any questions regarding best treatment option for patient __ Notify Medical Control EARLY to enable them to get magnet ready to deactivate AICD.

PRECAUTIONS AND COMMENTS

- Personnel in contact with the patient at the time of AICD firing will receive a shock of approximately 3 joules. This energy level constitutes NO DANGER to pre-hospital personnel. (May feel a slight tingling.)

REGION I EMERGENCY MEDICAL SERVICES
STANDING MEDICAL ORDERS
EMT – Intermediate

SMO: Automatic Implantable Cardiac Defibrillator (AICD)

Overview: The AICD functions by monitoring the patient's cardiac rhythm, rate, and QRS morphology. When a monitored ventricular rate exceeds the preprogrammed rate for more than 10 seconds, the AICD delivers a shock of about 6 to 30 joules to restore a normal sinus rhythm. If the defibrillation does not restore a normal sinus rhythm, the AICD will charge again and deliver up to four additional shocks. A complete sequence of five shocks, if required, may take up to 2 minutes. Once a slower rhythm is restored for at least 35 seconds, the device can deliver another series of up to five shocks if VT or VF recurs.

Personnel in contact with the patient at the time of AICD firing will receive a shock of approximately 3 joules. This energy level constitutes NO DANGER to pre-hospital personnel. (May feel a slight tingling.)

INFORMATION NEEDED
__ How many shocks the patient has received/sensed.

OBJECTIVE FINDINGS
__ Patient reports multiple shocks from AICD
__ Slight tingle felt by Provider when AICD is firing

TREATMENT
__ Routine Cardiac Care
__ Oxygen at 100 % via NRB mask
__ Cardiac monitor
__ Treat dysrhythmias per SOP's with the following exceptions:

- Avoid direct placement of the defib paddles over the AICD unit as this could damage the unit. Normal placement of the AICD is in the LUQ of the abdomen.
- **ALL DEFIBRILLATION ATTEMPTS SHOULD BE AT 360 JOULES or equivalent biphasic.**
- If NO response, alter paddle placement slightly between defibrillation attempts.

__ Any patient who has been shocked by his/her AICD should be strongly encouraged to seek medical attention regardless of the patient's current condition.
__ Notify Medical Control EARLY to enable them to get magnet ready to deactivate AICD.
__ If the AICD is malfunctioning and patient is hemodynamically stable and in pain from repeated shocks:

- Consult Medical Control for permission to administer **Morphine Sulfate 2 mg IVP.** Contact Medical Control for subsequent doses of Morphine if needed.

Documentation of adherence to protocol:

__ Report of patient's complaint and number of times patient reports AICD firing
__ Use of Morphine, if applicable
__ Additional treatment as needed per cardiac rhythm

Medical Control Contact Criteria
__ Contact Medical Control for any questions regarding best treatment option for patient __ Contact Medical Control for permission to administer Morphine and to give subsequent doses of Morphine if needed.

PRECAUTIONS AND COMMENTS

- Personnel in contact with the patient at the time of AICD firing will receive a shock of approximately 3 joules. This energy level constitutes NO DANGER to pre-hospital personnel. (May feel a slight tingling.)
- For equivalent biphasic energy level use manufactures recommendations, typically 120 to 200 J, if unknown select 200 J.

REGION I EMERGENCY MEDICAL SERVICES
STANDING MEDICAL ORDERS
EMT – Paramedic

SMO: Automatic Implantable Cardiac Defibrillator (AICD)

Overview: The AICD functions by monitoring the patient's cardiac rhythm, rate, and QRS morphology. When a monitored ventricular rate exceeds the preprogrammed rate for more than 10 seconds, the AICD delivers a shock of about 6 to 30 joules to restore a normal sinus rhythm. If the defibrillation does not restore a normal sinus rhythm, the AICD will charge again and deliver up to four additional shocks. A complete sequence of five shocks, if required, may take up to 2 minutes. Once a slower rhythm is restored for at least 35 seconds, the device can deliver another series of up to five shocks if VT or VF recurs.

Personnel in contact with the patient at the time of AICD firing will receive a shock of approximately 3 joules. This energy level constitutes NO DANGER to pre-hospital personnel. (May feel a slight tingling.)

INFORMATION NEEDED
__ How many shocks the patient has received/sensed.

OBJECTIVE FINDINGS
__ Patient reports multiple shocks from AICD
__ Slight tingle felt by Provider when AICD is firing

TREATMENT
__ Routine Cardiac Care
__ Oxygen at 100 % via NRB mask
__ Cardiac monitor
__ Treat dysrhythmias per SOP's with the following exceptions:
- **ALL DEFIBRILLATION ATTEMPTS SHOULD BE AT 360 JOULES or equivalent biphasic.**
- If NO response, alter paddle placement slightly between defibrillation attempts.
- Avoid direct placement of the defib paddles over the AICD unit as this could damage the unit. Normal placement of the AICD is in the LUQ of the abdomen.

__ Any patient who has been shocked by his/her AICD should be strongly encouraged to seek medical attention regardless of the patient's current condition.
__ Notify Medical Control EARLY to enable them to get magnet ready to deactivate AICD.
__ If the AICD is malfunctioning and patient is hemodynamically stable and in pain from repeated shocks:
- Give **Morphine Sulfate 2 mg IVP.** May repeat dose up to 10 mg maximum. Contact Medical Control for subsequent doses of Morphine if needed.

Documentation of adherence to protocol:

__ Report of patient's complaint and number of times patient reports AICD firing
__ Use of Morphine, if applicable
__ Additional treatment as needed per cardiac rhythm

Medical Control Contact Criteria
__ Contact Medical Control for any questions regarding best treatment option for patient __ Contact Medical Control for subsequent doses of Morphine if needed.

PRECAUTIONS AND COMMENTS

- Personnel in contact with the patient at the time of AICD firing will receive a shock of approximately 3 joules. This energy level constitutes NO DANGER to pre-hospital personnel. (May feel a slight tingling.)
- For equivalent biphasic energy level use manufactures recommendations, typically 120 to 200 J, if unknown select 200 J.