



Medtronic

Alleviating Pain · Restoring Health · Extending Life

Standard Letter
CRDM Technical Services U.S.
Mounds View, MN
Brady (800) 505-4636
Tachy (800) 723-4636
Instruments (800) 638-1991

OPTIONS FOR SUSPENDING MEDTRONIC ICD DETECTION

Rev. B.1, 20-JUN-2008, Page 1 of 1

DEFIBRILLATOR (ICD – IMPLANTABLE CARDIOVERTER DEFIBRILLATOR)

Patients with implantable cardioverter-defibrillators (ICDs) may be subjected to procedures in which devices that produce interference are used, such as electrosurgery or cautery equipment. Some types of interference can exceed the capability of the ICD to reject it and the ICD may erroneously interpret the interference as a rapid heart rate. This could cause the tachyarrhythmia detection criterion to be met and a VT or VF therapy to be delivered. If the interference signal is of sufficient magnitude, it could reset or possibly damage the ICD.

The following are options that can be implemented to manage these situations:

OPTION 1: Temporarily suspend detection by placing a magnet, Model 9466T or part number 174105, directly over the ICD (see Figure A for proper magnet placement).

OPTION 2: Temporarily suspend detection by placing a Medtronic Smart Magnet™, Model 9322AA, directly over the ICD. Follow Smart Magnet recommendations in the technical manual.

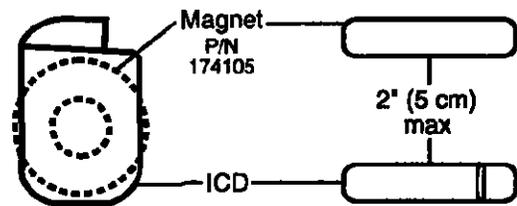


Figure A

These options result in **temporary suspension** of VT/VF detection via magnet application. The ICD will not interpret the EMI (electromagnetic interference) from cautery as an arrhythmia since detection is suspended while the magnet is in place. **Continuous monitoring of the rhythm is required. If VT or VF develops, simply remove the magnet and the device will detect and treat the arrhythmia. Magnet application does not affect the pacemaker function of the device. The device will not pace asynchronously when the magnet is in place. Continuous monitoring of the rhythm is required to assess for pacing inhibition due to EMI in pacemaker-dependent patients.**

OPTION 3: Program VT and VF detection OFF by using an appropriate Medtronic programmer.

Continuous monitoring of the rhythm is required. If a VT or VF develops, **external rescue is required.** Depending upon the ICD model, programmable asynchronous pacing **may or may not be available. If this is not available and the patient is pacemaker-dependent, continuous monitoring of the rhythm is required to assess for pacing inhibition due to EMI. VT and VF detection must be programmed back ON after the procedure.**

NOTE: Regardless of the method used, electrocautery application closer than 15 cm (6 inches) from the ICD/lead system could potentially damage circuitry in the ICD independent of whether the detection functions are On or Off.