Magnet Use for SJM Implanted Cardioverter-Defibrillators

When a patient with a St. Jude Medical® ICD needs to have his or her high-voltage therapies temporarily disabled for a medical procedure, a magnet may be used as a convenient alternative to temporary programming.

Magnet Mode: If the device is exposed to a constant magnetic field of sufficient strength, the tachy sensing circuitry will be temporarily suspended, thereby disabling any tachyarrhythmia detection. Once the magnetic field is removed, arrhythmia detection is again enabled. Magnet application will not affect the bradycardia pacing function; bradycardia pacing will continue as programmed. Unlike the function of a pacemaker, the brady pacing operation of an ICD is not forced to pace asynchronously when exposed to a magnet.

A cardiac device magnet can be obtained from the various device manufacturers. The magnet should be placed securely over the device. If the magnet is going to be left on for an extended period of time or during a surgical procedure, the magnet should be securely taped on the patient. Improper magnet placement may hinder magnet activation and could lead to undesired delivery of therapy.

Although generally not necessary, high voltage therapies may be indefinitely suspended via temporarily programming to “Tachy Therapy is Disabled” or “Tachy Zones Off” depending on the programmer options for each specific model. It should be noted that ICDs can have their magnet response programmed to IGNORE the placement of a magnet and therefore continue to deliver therapy even if a magnet is properly positioned over the device. The magnet response is rarely disabled, and if it is disabled, patients are generally aware of it.

If you have any questions concerning the use of magnets or suspending device therapy for St. Jude Medical ICD products, please feel free to contact Technical Services at 800-722-3774.