

Common Instructions Post Implant

- Keep your arm still overnight. This allows the leads to 'settle'.
- Keep the area clean and dry. Your nurse will give you instructions regarding at-home care
- Contact your health team if you develop a fever or the area becomes red or irritated in any way.
- Avoid rubbing your device or the surrounding chest area.
- Your doctor will give you instructions regarding driving.

Follow-up Visits

You will be sent an appointment letter to attend the ICD clinic at your hospital one month following surgery. At this check and other subsequent visits, your Cardiac Physiologist may make alterations to the ICD settings to optimise the program to fit your individual needs. You will have regular visits with your Cardiac Physiologist.

Most ICDs are now supported by a Remote Monitoring Service. This service allows your device to send information to your health team from your home. Your Cardiac Physiologist will explain this service and enrol you before you leave the hospital. Currently, you need to have a standard phone line in your house for this service.

Important Safety Information

Your device has built in features that will protect it from interference produced by most electrical equipment. Most of the things that you handle on a daily basis are not going to affect your device.

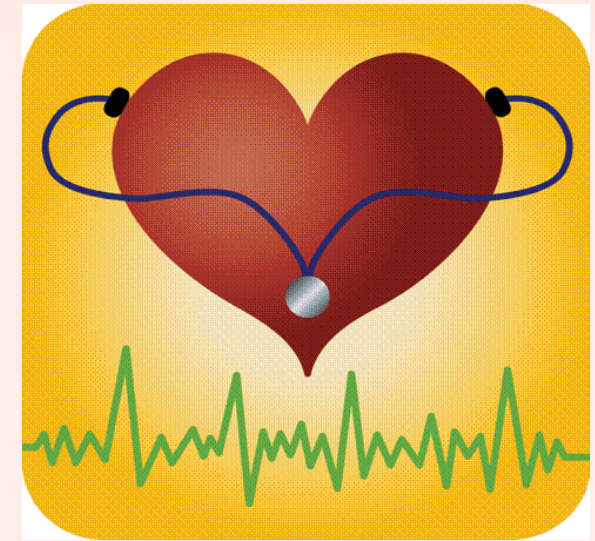
However, your device is sensitive to very strong electromagnetic fields. Your Cardiac Physiologist will explain about this at your ICD check before you leave the hospital.

Before undergoing any medical procedures, tell your health professional that you have an ICD. Most procedures usually do not interfere with your device.

Living with your ICD

There is an ICD Support Group in Christchurch which meets twice a year. They invite guest speakers and cover a wide range of topics that may be of interest to you and/or your family. You may choose to attend these meetings or you may prefer to just receive the newsletter by mail or email. Your Cardiac Physiologist will let you know about this.

It is natural for you to feel anxious or nervous about receiving an ICD. If you have questions, ask your nurse, Cardiac Physiologist or Cardiologist. In time you hopefully will forget you have an ICD and enjoy a better quality of life.



Defibrillator Information

Your doctor has recommended an Implantable Cardioverter Defibrillator (ICD).

An ICD is designed to monitor and treat rapid, abnormal heart rhythm problems, greatly reducing the risks associated with them.

This handout will explain briefly how a heart works and how an ICD can treat heart rhythms that are too fast or too slow. After your ICD implant, your device will be checked by a qualified Cardiac Physiologist before you leave the hospital. At this check, you have the chance to ask questions regarding your device and will be given a booklet which is relevant to your device which may help answer some of the questions about your heart and your ICD system.

The Human Heart

Your heart is a muscle about the size of your fist. It works as a mechanical pump and an electrical organ. It is able to beat because it produces electrical impulses which follow a pathway (see picture) causing the muscle contraction that pumps blood through your body.

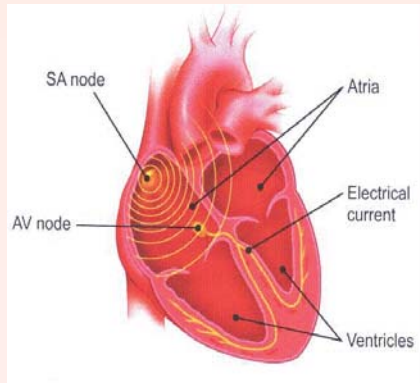


Figure 1. The heart and its electrical pathways.

Arrhythmia

An arrhythmia is any heart rhythm that is “abnormal”. It may be considered abnormal if it goes too fast, too slow or starts somewhere in the heart other than from the usual place.

An arrhythmia occurs when something goes wrong in the heart’s electrical system. If the arrhythmia continues, it may prevent the heart from pumping enough blood throughout your body.

There are many reasons why a heart may not beat ‘normally’. Whether due to disease, defect or injury, the heart’s electrical system can become unreliable. Your ICD device is capable of treating both tacharrhythmia (heart beating too fast) or bradycardia (heart beating too slow).

ICD System

An ICD system is made up of a device (or pulse generator) and a lead – depending on your specific condition, there can be one, two or three leads.

Device

The device is a small computer which runs on a battery sealed into a metal case. The battery typically lasts several years.

Lead

A lead is a small insulated wire that is implanted into your heart and connected to the device and delivers therapies to your heart. Your device constantly monitors your heart rate using the implanted lead(s). If your device detects a rapid, abnormal heart rhythm, it provides therapy to the heart through this lead.

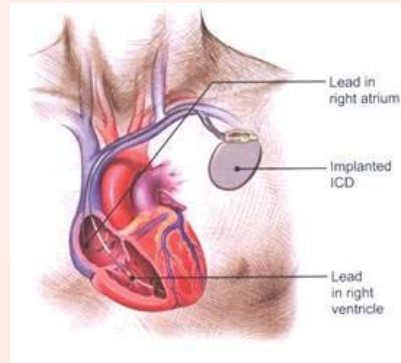


Figure 7. An implanted ICD system

What does an ICD do?

An ICD corrects rapid, abnormal heart rhythms. It constantly watches the heart and delivers treatment if necessary.

Although this is its primary function, it can also treat slow rhythms like a pacemaker.

Therapies

ATP – Anti-Tachycardia Pacing

Some arrhythmias can be treated by a series of small electrical pulses. You probably will not notice this therapy.

Defibrillation Therapy

If your heart rate is too fast and chaotic or cannot be stopped by Anti-Tachycardia Pacing, a shock may be delivered. A shock has been described as a swift thump or a blow to the chest.

Your Cardiac Physiologist will explain what to do if you receive a shock.

ICD Surgery

An ICD is implanted during a surgical procedure. You will not be completely anaesthetised but to keep you comfortable, you will be given sedation and a local injection to numb the area.

During your procedure, your doctor will insert the lead(s) into a vein through a small incision near the collarbone. It is then passed through the vein and into your heart where the tip of the lead will rest against your heart’s inner wall.

The device will be tested and the incision closed. You may experience some discomfort from the incision area as you recover from the surgery.