

Consent Information – Implantable Cardiac Defibrillator

1. What is an implantable cardiac defibrillator (ICD)?

An ICD will help slow down a fast heartbeat. Sometimes the heart beats too fast. This does not allow the chambers of the heart to fill properly. If enough blood is not pumped around the body and it is untreated, it may lead to dizziness, fainting or loss of consciousness. This is a potentially life threatening condition.

The ICD stops the fast heartbeat. This is done by 'pacing' the heart rapidly or by giving an electrical 'shock' to the heart.

There are three types of ICD. Your doctor will decide which defibrillator suits your condition.

- i. Single Chamber: one lead to the lower chamber of the heart.
- ii. Dual Chamber: two leads. One to the upper and one to the lower chamber of the heart.
- iii. Biventricular: three leads. One to the upper and two to the lower chambers of the heart.

The ICD has two parts, a pulse generator, which senses the heartbeat and delivers impulses to the heart; and a sensing lead, which sends impulses to and from the heart.

The ICD is 'programmed' to your condition by the doctor who puts it in. An external machine is used to check the ICD and to program it. The ICD is battery powered. The ICD 'stands by' and checks the heart rate. If the heart rate is too fast, it will activate. This will give a 'shock' to the heart.

After the ICD is implanted

The battery is checked each time you come to your clinic appointment. The battery lasts about 7 years and cannot be recharged. When the battery needs changing, it will require a procedure similar to this procedure.

After an ICD is implanted you are not allowed to drive until cleared by your Cardiologist.

2. What are the risks of this specific procedure?

There are risks and complications with this procedure. They include but are not limited to the following.

Common risks and complications (more than 5%) include:

• Bruising at the device site.

Uncommon risks and complications (1-5%) include:

- The pacemaker lead can move. The lead will need to be put back into place by repeating this procedure.
- Infection of the pacemaker site. This will need treatment with antibiotics and/or removal of the pacemaker.
- Bad bruising if you are taking blood thinning drugs such as Warfarin, Pradaxa,, Xarelto, Eliquis, Aspirin, or Clopidogrel (Plavix or Iscover)
- Unexpected pacemaker failure. There is a risk of battery (generator) or lead failure. This is uncommon but means the battery or lead will need to be removed and a new one put in.

Rare risks and complications (less than 1%) include:

- A punctured lung. This may require a tube to be inserted into the chest to reinflate the lung.
- Blood clot in the subclavian vein.
- A hole is accidentally made in the heart or heart valve. This will need surgery to repair.
- Blood clot in the lung.
- Heart attack.
- A stroke. This can cause long term disability.
- Death due to the procedure or other heart problems