



## Consent Information – Permanent Pacemaker Implant

### 1. What is a pacemaker?

A pacemaker will treat a slow heart beat.

There are three types of Pacemakers. The doctor will decide which Pacemaker 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.

A Pacemaker is made of two parts, a pulse generator, which gives off impulses and a lead(s), which sends impulses to and from the heart.

The pacemaker is 'programmed' to your needs by the doctor who puts the device in. An external machine is used to check the pacemaker. The rate of the pacemaker can be set using this machine. As part of the clinic test, the pacing speed of your pacemaker may be temporarily increased and decreased. Then it will be reset to its normal setting.

You will have the following procedure:

Before the procedure, you will be given antibiotics. These are given to prevent an infection from occurring.

The procedure is usually done under light sedation

You will have an injection of local anesthetic. The pacemaker is put in below the left or right collarbone, just under the skin. The skin is cut to put the pacing wires (leads) into a vein which leads to the heart. The leads are threaded down the vein, into the heart. The doctors can see the lead using x-ray imaging. Once positioned in the heart, the leads are tested to make sure they are working properly.

Then they are connected to the 'pulse generator'. which is then placed under the skin and then the skin is sewn back together.

### Pacemaker Device

The battery is checked each time you come to your clinic appointment. The battery lasts between 7 and 10 years and cannot be recharged. When the battery needs changing, it will require a procedure similar to this.

**You cannot drive for 2 weeks after a Pacemaker.**

### 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.

**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 may need surgery to repair.
- Blood clot in the lung.
- Heart attack.
- A stroke. This can cause long term disability.
- Death is possible due to the procedure or other heart problems.