

We hope this leaflet will help you to understand a little more about your operation and the treatment you will receive after it. If you have any further questions, please do not hesitate to ask a member of the nursing or medical staff.

They will be happy to help you.

### **WHAT IS A SUBCUTANEOUS ICD?**

You are being admitted to hospital to have a subcutaneous ICD (Implantable Cardioverter Defibrillator) fitted. This is a device which goes under the skin and is designed to treat fast heart rates.

The S-ICD system is made up of a lead and a box, which contains the electronics and a battery. It is inserted during a simple procedure, which is done in one of the cardiac labs under general anaesthesia.

The operation usually takes around one and a half hours, but varies for each individual patient.

### **PREPARATION FOR ADMISSION TO HOSPITAL**

You will usually be admitted on the day of your operation. You will be asked to attend a pre-operative assessment up to one week before your procedure, where a nurse will ask you some questions and carry out a few routine tests. The assessment will include tests for blood pressure, pulse, a heart trace (ECG) and swabs. We will also record your height and weight, and possibly take a chest x-ray.

If you have been found to be carrying particular bugs (types of an organism called Staphylococcus Aureus), which is quite common, then you will be contacted and asked to go to your GP and you will be given some nasal creams and be asked to wash daily for 5 days in a special solution.

You will be told specifically what to do if you are taking aspirin, clopidogrel, prasugrel or warfarin. Whether these drugs are stopped or continued depends on your individual circumstances and you should continue them unless told otherwise.

### **BEFORE THE OPERATION**

We ask you not to eat anything for 6 hours before your operation, but you can drink water until 2 hours beforehand. This is to prevent you being sick during the procedure and it allows us to give you sedation if you require it. Do take your usual tablets with a sip of water. You will be given antibiotics through a small needle in the back of your hand, as a routine precaution to prevent infection. To reduce the risks of infection, we ask you to have a bath or shower on the morning of your procedure and to put on a hospital gown and paper pants. Please

do not use talcum powder, deodorant or make up. So that the procedure may be carried out as safely as possible, we also ask you to remove all jewellery, including hairpins (except your wedding ring, which can be taped to your finger), and any glasses, contact lenses, hearing aids or dentures that you wear.

On admission the doctor performing the procedure will visit you and explain the operation to you, and you will be asked to sign a consent form. Please feel free to ask any questions. A cardiology nurse will also visit you (if you did not attend the pre-operative clinic) to make sure that you are well prepared and will answer any final questions you may have. The anaesthetist will also see you before the procedure.

### **THE OPERATION**

This procedure is carried out under operating theatre conditions to reduce the risk of infection, so the doctor and the other staff will wear a sterile gown, gloves and facemask.

There will be a doctor, a nurse, a health care assistant, a technician, representatives from the ICD company and the anaesthetic staff in the room.

You will be given a general anaesthetic (so you will be asleep throughout the procedure).

A small incision is made in your left hand side over the ribs below the breast. A pocket is made under the skin. A lead is “tunnelled” under the skin below the breast to the breastbone and then up the side of the breastbone to just under the collarbone. The lead and box are secured in place with stitches and the wounds are closed with glue. There are no stitches to remove.

Whilst you are asleep, at the end of the procedure we will make sure that the device can detect and treat fast heart rates.

### **RECOVERY**

After the operation you will be taken back to the ward. You will be able to have something to eat and drink.

You are advised to rest on your bed for a while after your operation to recover from the anaesthetic. A nurse will regularly check your blood pressure, pulse and wound. You will be offered painkillers and there will be some discomfort for a number of days after the procedure. Most patients will go home the following day.

### **FOLLOW UP**

Before you go home the technician will check that your device is working properly.

You will be given an appointment for one month’s time to have

your device checked again. These technical checks are required throughout the lifetime of the device on a 3-monthly basis, but they only take a few minutes and are not uncomfortable. The battery life varies from patient to patient and will be monitored during your checks.

If you cannot attend an appointment please contact the pacemaker clinic to rearrange a convenient time. Please inform the pacemaker clinic if you change your home address or GP details.

### **GOING HOME**

Your chest area will be tender for a few days, perhaps with some bruising. You may wish to take some paracetamol or a painkiller such as codeine or tramadol; you can be provided with some to go home with if you wish.

### **LOOKING AFTER YOUR WOUND**

**If you develop a temperature, or the wound becomes red or inflamed, please contact the pacemaker clinic promptly or the cardiac day unit or coronary care.**

If you have the glue closing the wound please ensure that it is left uncovered. The glue will start to flake off after 7 days. You can shower on the same evening of the procedure but should not soak the area; pat the area dry with a clean towel.

If you have a dressing covering the wound site please remove after 2 days and leave it uncovered. The nurse will give you more dressings if required. The wound should be kept clean and dry for 3 days after the procedure. You should then shower normally and pat the area dry with a clean towel.

If you have dissolvable stitches closing the wound the stitches will dissolve and no further action is needed. If you have non-dissolvable stitches you will be given an appointment to come back to the Cardiac Day Unit to have them removed, usually 7 days after the procedure.

You will be given further specific wound care advice before you go home.

## RISKS AND COMPLICATIONS

Life-threatening complications are rare. Although every effort is made to minimize problems, you should be aware that all invasive procedures carry some risk and we advise you to discuss this with the doctor before signing the consent form.

The complications specific to having a subcutaneous ICD fitted are:

- Infection (2%)
- Serious swelling of the wound due to bleeding (1%) – note almost everyone gets some bruising
- Risks associated with general anaesthesia (very low)
- Risks associated with testing the device – serious complications around 1 in 500

## FOLLOW-UP INFORMATION: SOME DO'S AND DON'TS

**DON'T** lift anything heavy or do any strenuous exercise for one month after the implant.

**DON'T** drive for at least one month following the S-ICD implant. For each patient the rules vary and you will be given specific guidance. Some patients cannot drive for 6 months.

**DON'T** go through the metal detection loop at airports. You will need to show your S-ICD identification card and may be searched manually.

**DON'T** store your mobile phone in a pocket over your device.

**DON'T** linger around shop doorways where electronic anti-theft gates may be installed. Patients are advised to enter and exit shops at a normal pace.

**DO** carry your S-ICD identification card with you at all times. This has your details on and may be needed in an emergency.

**DO** let the DVLA in Swansea and your insurance company know that you have an S-ICD.

**DO** tell your dentist you have an S-ICD.

## DOMESTIC EQUIPMENT

There is no risk when using electrical equipment (including microwaves) in the home or during normal day-to-day activities.

Although the risk of external interference with your device is very low, it is possible. If you have any ill effects whilst in close proximity to electrical or magnetic equipment move away from the source.

If you are unsure of the possible effects of any device or equipment you wish to use please contact the pacemaker clinic.

## FOR HELP AND FURTHER INFORMATION

If you have any queries regarding your S-ICD please contact:

*The Pacemaker Clinic*  
Mon-Fri 8:30am to 5pm  
01823 342953

*The Cardiac Day Unit*  
Mon- Fri 8am to 6pm  
01823 342067

*The Coronary Care Unit (CCU)*  
For urgent assistance is required outside of these hours  
01823 342066

*The Musgrove Park BHF Arrhythmia Nurses*  
Mon-Fri 8:30am to 5pm  
01823 343595

*The British Heart Foundation*  
Greater London House  
180 Hampstead Rd  
London  
NW1 7AW  
<http://www.bhf.org.uk/heart-health/treatment/pacemakers.aspx>  
0300 330 3311

*Cameron Health*  
<http://www.cameronhealth.com/home/>  
This site provides excellent information about your device.

# Subcutaneous ICD

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