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यदि आपको अनुवाद की ज़रूरत है तो कृपया इस नंबर पर फोन करें: 01932 723553

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Undergoing Implantation of an Internal Cardioverter Defibrillator (ICD)

Advice for Patients and their Carers



Epsom and St. Helier **NHS**
University Hospitals
NHS Trust

Further Information

We endeavour to provide an excellent service at all times, but should you have any concerns please, in the first instance, raise these with the Matron, Senior Nurse or Manager on duty. If they cannot resolve your concern, please contact our Patient Advice and Liaison Service (PALS) on 01932 723553 or email pals@asph.nhs.uk. If you still remain concerned please contact our Complaints Manager on 01932 722612 or email complaints@asph.nhs.uk.

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Introduction - Information for Patients and Carers

This booklet has been designed for patients undergoing implantation of an Internal Cardioverter Defibrillator (ICD) at St Peters Hospital NHS Foundation Trust and their carers to help you make an informed decision. You may be having the procedure as a day case or after being admitted to hospital. It gives important information about the ICD procedure, the benefits and risks to you, about going home and for getting back to normal afterwards. Your doctor has recommended this procedure, however, it is your decision to go ahead with the procedure or not.

InHealth is an independent service provider working in partnership with Ashford & St Peters NHS Foundation Trust and Epsom & St Helier University Hospitals to provide a high quality service for the local community.

If after reading this leaflet, you have any further questions regarding this booklet or your procedure please call one of the following:

- The Angiography Suite - 01932 722262
- Dr Odemuyiwa's Secretary – 01372 735 128

Why do I need an ICD?

An ICD is designed to sense, monitor and treat abnormal heart rhythms. You may have experienced OR be at risk of experiencing an abnormal, fast heart rhythm that can cause you to become unwell, unconscious, or your heart to stop beating.

This procedure is carried out by a cardiologist (heart specialist) using X-ray screening. X-ray screening may be harmful to a foetus, so please tell your Consultant or the Angiography Suite if you are, or think you may be pregnant, as soon as possible.

USEFUL WEBSITES:

Further information may be obtained by logging on to any of the following websites:

www.bcs.com

www.bhf.org.uk

www.dvla.gov.uk

www.nhsdirect.nhs.uk

www.patient.co.uk

www.heartrhythmcharity.org.uk

Further Information:

- NHS smoking helpline: 0800 0224332 and at www.smokfree.nhs.uk
- Advice on maintaining a healthy weight: www.eatwell.gov.uk

Dr Jacques: 01932 722 230

Dr Odemuyiwa: 01372 735 128

Dr Wilkinson: 01932 722 230

Patient Feedback

All patients will be offered the opportunity to complete a patient satisfaction survey at the end of their procedure. This information is audited and available to patients. Every effort is made to improve the service we offer. We would also appreciate your comments regarding this information if you think it could be improved in some way.

Complaints

If you are unhappy with any aspect of the service provided within the Angiography suite or ward, we do apologise. If you would like to make a complaint, please address your letter to either, the Angiography Services Manager and post to Angiography Suite, St Peters Hospital, Guildford Road, Chertsey, KT16 0PZ or alternatively you can request a copy of the InHealth or NHS Trust complaints policy by contacting any of the staff on the ward or the Angiography Suite.

Are there any Alternatives to an ICD?

Sometimes changes to your medications can help. Surgical correction is the other option. These options should be carefully discussed with your Cardiologist as they may not be suitable or as effective as an ICD.

What will happen if I decide not to have the ICD?

You may be at a higher risk of further heart problems such as dangerous heart rhythm abnormalities. If you decide not to go ahead with the ICD procedure you should discuss this carefully with your doctor.

Before the ICD Procedure

PRE-ASSESSMENT APPOINTMENT

You will be invited to attend a face to face pre-assessment with a nurse a few days or weeks before your procedure. The pre-assessment appointment is to advise you about the preparation you need to do and what medications you need to stop and when. The pre-assessment nurse will also take two swabs, one from your nose; the other from your groin to test for MRSA (this is routine hospital policy for any admission). You will also be given a special washing solution to use twice before your procedure to help clean and prepare your skin and body for the procedure.

WARFARIN

If you take Warfarin, you will be given advice for managing your medication before, during and after the procedure. If you are not sure when to stop your Warfarin, you must contact the

Angiography Suite at least **one week** prior to your procedure. It is important that your blood clotting (INR) levels are lower prior to your procedure to manage the bleeding from your wound after your procedure. You will also need to have a blood test at an anticoagulation clinic, 7-10 days after your procedure, to ensure your levels have stabilised.

ASPIRIN AND CLOPIDOGREL

If you are taking either of these tablets please discuss this with your nurse at your pre- assessment appointment. You should not stop taking this medication unless instructed by your pre-assessment nurse or cardiologist.

DIABETIC PATIENTS

If you have diabetes and use insulin, please contact the Diabetes Nurse **one week** before your procedure to receive appropriate advice for managing your medication and diet before and during the test. The number to ring is:

- **St Peters Hospital** 01932 723315 and ask for the Diabetes Nurse.
- **Epsom Hospital** 01372 73 5444 and ask for the Diabetes Nurse

If you have diabetes and are taking metformin/avanadamet tablets, you should stop taking the tablets the **day before** your procedure. Do not stop taking other diabetic tablets. Bring your glucose tablets with you on the day of your procedure.

Late Complications of an ICD

- In 1 in 1.000 cases, an infection of the wound will happen. You should not shave the chest hair before your procedure in case you cut your skin. A nurse will use clippers to remove any hair. Antibiotics will be given to you during your procedure.
- In 1 in 50 cases a blood clot in a vein may occur in your arm. You may need blood-thinning medication.
- In less than 12 in 100 the ICD will give you a shock when you do not need one. The heart specialist will usually be able to reprogramme the ICD to prevent it from happening again.
- In less than 3 in 100 (after 5 years) or 1 in 10,000 cases a fault can occur which is life threatening.
- In 7 in 100 cases a patient will require changes to their medication if the heart failure symptoms worsen. You may feel breathless and have swollen ankles.

Alternatives to an ICD Implant

Sometimes changes to your medications can help with abnormal heart rhythms, however medication is not as effective as an ICD.

Having an ICD implanted greatly reduces the risk of life threatening heart rhythms which may prove fatal.

If, after reading this leaflet you have any further questions regarding the necessity for this procedure and/or concerns about going through the procedure, please contact the cardiologist responsible for your care via the appropriate consultant's secretary listed below:

Dr Beeton: **01932 722 308**

Dr Fluck: **01932 722 069**

Benefits of an ICD

Having an ICD inserted may eliminate or reduce the need for any oral medication. It will also monitor, recognise and treat abnormal heart rhythms which may be life threatening.

Risks Associated with an ICD

In order to consent for the ICD procedure, you must understand the possible adverse effects and risks involved. These are:

- Bleeding and/or bruising where the ICD was inserted.
- In 1 in 100 cases, a patient will have a pneumothorax where air escapes into the space around the lung. This is usually very small and does not cause any problems. If a lot of air escapes this may need to be sucked out using a needle and by placing a special drain into the chest area. If you suddenly become short of breath at home, go to your nearest A/E or call an ambulance.
- In 3 in 100 cases, a lead will move out of place. You may need to have the procedure again to put the lead back in place.
- In 1 in 400 cases the ICD battery will come through the skin. You will need another operation to replace the battery.
- In 1 in 500 cases, blood leakage around the heart will occur (cardiac tamponade). This is serious and can usually be treated by draining the blood using a small tube.
- In less than 1 in 1,000 cases blood will escape into the space around the lungs. You may need to have a drain placed into your chest, or further surgery.
- In less than 3 in 1,000 cases the heart rhythm becomes unstable leading to cardiac arrest.

The Evening before your Procedure

You must avoid alcohol for 24 hours before and after the pacemaker to avoid any complications from bleeding.

On the evening before your procedure, please shower or wash your body using the special washing solution.

If your procedure is the following morning, do not have anything to eat or drink from midnight.

On the Day of your ICD implant

If your procedure is in the afternoon, you must not eat or drink anything after 6.00 am. You can have a light breakfast of tea and toast at 06.00 am.

For both morning and afternoon procedures, you should take your usual medication (including blood pressure or water tablets) at 6.00 am with a small amount of water on the day of your procedure. If you do not have a coronary stent please do not take your aspirin or dipyridamole (Persantin) in the morning. Please bring all your medications with you on the day of the procedure.

Please bring your dressing gown and slippers with you. Nightclothes are not necessary as you will be given a gown to wear.

Avoid bringing any valuables or cash with you, as they may be left unattended while you are undergoing your procedure.

You may wish to bring some reading material to occupy yourself after the procedure.

Should you require a chaperone or interpreter, please inform the Angiography Suite prior to your procedure.

Where do I go for my Procedure?

Please arrive at Maple ward, St Peters Hospital at the time requested on your appointment letter. Maple ward can be accessed from the Out Patient Departmental block or via the Duchess of Kent wing.

Telephone: **01932 722431**

Please note, Maple Ward is a same-sex gender ward. Occasionally there may be some delay in obtaining a bed for you due to emergency admissions. We are sorry if this happens and will keep you fully informed of progress and the availability of a bed for you.

The ward is not suitable for visiting children.

Due to limited space in Maple Ward, we ask that no relatives or friends remain with you for the day. They may drop you off and collect you.

You must be escorted or be driven home after the procedure, as you must not drive. A responsible adult should stay with you overnight.

The ICD Implant Procedure

During your admission, you will be asked to put on a gown and paper pants. Your details will be checked and a name band placed on your wrist. Where necessary the chest hair will be clipped on the left side.

You will sign your consent form with a cardiologist.

The procedure is performed in a special x-ray room called a cardiac catheterisation laboratory. It looks like a small operating

The rules for ordinary license holders are complicated and your heart specialist will let you know which rules apply to you and when you can drive again.

You will need to also inform your insurance company.

The type of work you do may also be affected particularly if your job involves operating machinery. You will need to discuss this with your Cardiologist.

You should avoid activities that could be dangerous if the ICD shocked you while you were doing them, such as swimming alone, climbing or hill-walking. You should avoid contact sports and activities that put pressure on your chest.

What should I do if the ICD gives me a Shock?

If your ICD does give a shock, it can be alarming. It feels like a bang in the chest and can even be strong enough to make you fall over. Remember, that this is why the ICD was fitted.

If you only receive one shock and you feel well afterwards, call the cardiology outpatient clinic on **01932 722530** or your doctor to arrange for a check-up. If you have more than one shock and/or feel unwell after the shock, you must call an ambulance.

You will continue to have regular check-ups at the hospital. For the first year these may take place 6 monthly and then yearly.

The Cardiology department offers comprehensive support for ICD patients after the procedure. The support group can be contacted on **01932 722530** or via e-mail on ian.clement@asph.nhs.uk

The wound site will feel tender and look bruised. This is normal and you may need to take a painkiller such as Paracetamol to help. Do not take Aspirin as a painkiller. The bruising may take up to three weeks to disappear.

Living with an ICD

There is a risk the electro-magnetic fields could interfere with the ICD so you should take the following precautions:

- Do not carry or use a mobile phone or iPod within 6 inches (15 cm) of the pacemaker. It is best to hold a mobile phone or iPod on the opposite side to where the ICD was inserted.
- You should avoid security systems at airports and standing for too long near shop entrances
- You should not use a TENS machine.

You do not need to take any precautions with everyday household appliances such as microwaves, oven or hi-fi equipment.

If you need to go to hospital to have a scan you should let a member of staff know that you have an ICD. You cannot have an MRI scan.

DRIVING

The Driver and Vehicle Licensing Agency (DVLA) has strict rules about driving if you have an ICD. If you drive a large goods vehicle (LGV) or public service vehicle (PSV) you must let the DVLA know that you have an ICD. You will not be able to drive a LGV or PSV again.

theatre. You will be asked to walk to the catheter laboratory. If you are unable to walk, a wheelchair will be provided.

The procedure will take between 45 minutes to 1.5 hours.

There will be several members of staff in the room during the procedure including a doctor, nurses, a cardiac physiologist and a radiographer. All of the staff will be wearing hats and masks during the procedure in order to prevent you getting an infection. You will be asked to lie on your back on a special x-ray table and will be asked to wear a paper hat.

The procedure drape will be placed over your body and head to reduce the risk of infection. The head drape will be positioned over a frame so that you can turn your head and see out of the side.

A doctor and nurse will be with you at all times. If the ICD device is to be tested (this does not occur with all implants); you will be given a sedative to make you sleepy. In addition, painkillers will be given through a vein to ensure you remain comfortable.

ECG electrodes that allow for the continuous recording of your heartbeat will be placed on your chest and limbs.

The radiographer will move the table and camera into position so that the x-ray pictures can be taken.

The procedure will most often be undertaken through an incision below your left collarbone and above your left breast; however, occasionally the right chest area will be used.

The skin around the incision area below your collarbone will be numbed with a local anaesthetic; this will sting for a moment. Once numb the doctor will make a cut into the skin and fatty tissue.

One, two or three leads will be placed into your vein and passed to your heart under x-ray imaging to guide the leads. When the lead(s) reach your heart it is normal for your heart to beat a few extra times (palpitations). A small incision about 4 inches/ 8 – 10cm wide will be made and a pocket created under the skin for the ICD (battery) to be inserted. You may feel a pulling sensation while the pocket is made. The leads will then be connected to the ICD (battery) generator.

Your heart specialist will give you antibiotics during the procedure to reduce the risk of infection.

Once the doctor has completed some checks and tested the ICD and battery with the cardiac physiologist, the leads and battery will be stitched into position.

The skin incision will be held together with either stitches or by special skin glue, which will peel off after several days. If non-dissolvable stitches are used you will need to have these removed 5 days later. If a dressing has been placed over the skin incision, this can be removed after 3 days. If the wound is dry, leave the wound uncovered. In all cases, whether your stitches are dissolvable or not, or glue has been used, you should see your GP/Practice Nurse 5 days after your ICD has been inserted. This is so that they can check the healing process of your wound.

You will rest in the ward for 2-4 hours. The ward nurse will check your wound site regularly for bleeding or swelling and will record your blood pressure and heart rate.

You may eat and drink on return to the ward.

A chest X-Ray will be required 2 hours after you return to the ward to check the lungs and to ensure that the leads are in the correct position.

The cardiac physiologist will talk to you about how to look after your ICD. The cardiac physiologist will also advise on follow-up appointments in the future.

Providing there are no complications, you will be allowed to go home later in the day. A post procedure instruction sheet will be given to you to help you look after your wound.

Going Home from Hospital

If the wound site begins to bleed, you or the responsible adult should apply a firm pressure over the dressing for 15 to 20 minutes and then gradually release the pressure. If the bleeding continues keep on pressing firmly on the wound and go to your nearest A/E.

Keep the wound clean and dry for the first 5 days after your ICD implant and until you have seen your practice nurse or GP on the 5th day. Do not immerse the wound area in a bath and protect from water splashes if using a shower. Do not apply talc to the skin area or pick at the wound or skin glue.

The dressing can be removed on the 3rd day after your procedure. If the wound appears dry you do not need to replace the dressing. If the wound appears to have a discharge you must see your GP or call the Angiography Suite on 01932 722262. If out of hours, you should contact your local Emergency Department.

You should not operate machinery (including cooking) for at least 24 hours. It is important that you do not do any strenuous activity for about a week, particularly activities that involve moving your affected shoulder.

It is important to contact your GP or the Angiography Suite for further advice.