and finally...

Please make sure you have read this booklet carefully. Remember to bring all of the medication you are currently taking into hospital with you.



Catheter Ablation for Ventricular Tachycardia

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This booklet it to help you understand about your catheter ablation for Ventricular Tachycardia (VT). Please read this booklet carefully. If you have any questions or concerns, please contact the arrhythmia nurse specialists on **0300 019 6154** or email **arrhythmia.nurses@uhd.nhs.uk**.

On the morning of the procedure:

Please shower on the morning of your admission and bring all your medication with you to hospital.

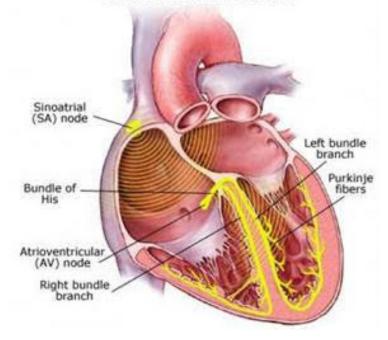
You will receive instructions on when you should stop eating and drinking prior to admission. A small sip of water to swallow tablets is allowed.

It is very important you follow the instructions on stopping medication before your procedure. You will receive instructions with your admission letter.

If you are unsure of your instructions, please call the arrhythmia nurse specialists.

The electrical system of the heart

Cardiac conduction system



If you are continuing to notice your heartbeat, it is important to try and have an ECG performed while experiencing these symptoms. This can be performed either at your GP surgery or by attending the hospital. If this is the case, please inform the arrhythmia nurse specialists over the telephone.

If you have any new medical concerns when you return home you should contact your GP. In any medical emergency you can present to the Accident and Emergency Department or call **999**.

Further support and advice

If you or your family would like to speak to someone about your procedure please contact our arrhythmia nurses on 0300 019 6154, Monday to Friday between 9am-5pm or email arrhythmia.nurses@uhd.nhs.uk

Please leave a message on the answerphone if you don't get a response initially and someone will call you back at the earliest opportunity.

The above number should only be used for general enquiries. If you have an unrelated medical concern please contact your GP, or in the event of an emergency please dial 999 and ask for an ambulance.

Helpful websites

The following are websites that provide further information for patients. While we recommend these, we cannot be held responsible for information that you collect from them. To find out more, simply log on to the websites below:

www.arrhythmiaalliance.org.uk www.bhf.org.uk www.dvla.gov www.guidant.com www.medtronic.com www.sjm.com

02

Catheter Ablation for Ventricular Tachycardia

This will enable your heart rate, blood pressure and oxygen levels to be observed throughout the procedure. An oxygen mask may also be placed on your face.

A tube (urinary catheter) may be inserted into your bladder while you are asleep to drain urine. This will usually be removed before you return to the ward. Once you are asleep or feeling sleepy, both groins will be cleaned with antiseptic solution and local anaesthetic injected here.

If you are under local anaesthetic it can cause a stinging sensation for a few moments before the area feels numb. The wires used to record electrical signals from within the heart will then be inserted through fine plastic tubes in your groin. These are guided into position using x-ray equipment.

The x-ray machine will scan over you taking pictures from different angles. As with all x-rays, if there is any chance that you are pregnant, please let the doctor or nurse know before the procedure begins. The staff in the lab will wear protective aprons because they are exposed to x-rays every day.

Once the wires are positioned, the doctor will look at your heart rhythm disturbance by recording the electrical signals on a computer. The ablation is done by applying radio frequency energy which heats the tip of one of the wires positioned in the heart. It is necessary to deliver several amounts of energy to ensure complete destruction of the tissue.

Very occasionally during the procedure the heart may go into a fast rhythm which needs to be treated. In such instances an electrical shock may be administered to restore the heart to its normal rhythm. Further sedation will be given so you will not be aware of this as you will be asleep. Once the heart has been restored to its normal rhythm the procedure will then continue as before.

At the end of the procedure the doctor will remove the wires from the heart and will usually remove the tube from the artery. Normally a collagen plug called an angioseal will be placed in the artery to close it which will dissolve within 90 days. You will be given an information card about this after the procedure. Sometimes the tubes in the vein are left in place at this stage and will be removed three to four hours later on the ward. This is to allow the blood thinning medicine (Heparin), which may have been given during the procedure, to wear off.

Are there any complications?

Although the following complications must be mentioned, the risk of them happening is extremely low. Please feel free to discuss any particular concerns that you have prior to the ablation.

- Your groin will have some minor bruising and short-lived tenderness
- There may be damage to the blood vessels at the top of the leg (2:100 or 2% chance) resulting in a large bruise and possible bleeding. This is called a False Femoral Aneurysm. Applying extra pressure to the vessel can usually treat this, but occasionally a small operation is required
- Blood may leak out around the heart and need to be drained off (1:100 or 1% chance)
- The procedure may cause major complications such as heart damage or a stroke (1:200 or 0.5% chance)
- The risk of a major complication causing damage to heart structures such as heart valves or damage to the electrical system in the heart requiring intervention including emergency surgery is 1:200 (0.5%)
- Risk of death (1:200 or 0.5% chance)

Before the ablation

A hospital gown will be provided for you to wear and a little plastic tube will be inserted into your arm to enable you to be given any medication you might require during the procedure.

Before the ablation you will be seen by a doctor who will explain what the procedure involves and the risks or complications associated with it. You will be asked to sign a consent form to allow the ablation to go ahead. You will be seen by an anaesthetist before the procedure.

After the Ablation

After the procedure has finished you will be taken to the recovery area for close observation and monitoring while you are waking up from the anaesthetic. Once you are awake a nurse will check your blood pressure, pulse and the wound in your groin. You will continue to be observed for a couple of hours before returning to the ward. The tubes in the large vein in the groin will be removed and the nurse will press over the small hole in your leg for at least 10 minutes.

Catheter

Ablation for Ventricular Tachycardia

During this time you will need to lie flat for approximately two hours to enable the wound to heal. Your nurse will make sure that you have something to drink and that you are comfortable. Once you are able to sit up a little you will be provided with something to eat.

You will be attached to a heart monitor overnight and an electrocardiogram (ECG) will be taken in the morning. Your doctor or arrhythmia nurse will discuss the catheter ablation with you and you should be able to go home the following morning.

Going home

Please consider the following points upon your discharge from hospital:

- You must have someone to collect you from the ward
- We do not advise using public transport
- The Driving and Vehicle Licensing Agency (DVLA) have guidelines for patients who have received an ablation. Generlaly you can't drive for two days after an ablation. If you drive for a living or hold a Group 2 (bus/lorry) licence, please ask the arrhythmia nurses or DVLA what restrictions apply. You can access the DVLA guidelines at www.gov.uk/driving-medical-conditions
- You will need to plan one week off work following a catheter ablation
- You may experience some chest discomfort for up to one week after the procedure
- It is not unusual to experience some bruising of the groin which may last for a few days
- You should continue to take your medications as normal unless the doctor has advised you otherwise
- It is not unusual for people to feel tired for some time after the procedure
- You will be seen in the outpatient clinic approximately two to three months following the procedure. Prior to this you will be asked to wear a monitor so we can analyse your rhythm

It can take a while for the heart to settle down after the ablation and for the doctor to know how successful the procedure has been. The doctor may also ask that you have a portable heart monitor fitted as an outpatient following the ablation. The heart consists of two pumps side by side. One pump circulates blood around the lungs before emptying into the second pump. The second pump circulates blood around the body. Each pump consists of two chambers, the atrium and the ventricle.

The heart needs an electrical impulse to generate a heartbeat. In normal heart rhythm the electrical impulse starts in the heart's natural pacemaker called the Sino Atrial node (SA node). This is found in the right atrium. The electrical impulse travels through the tissues of the conduction system causing the heart muscle to contract in sequence, the atrium before the ventricle. There is a junction between the atria and ventricles called the Atrio-Ventricular node (AV node) that allows communication between these chambers.

The heart normally beats 50 to 100 times per minute at rest and faster during physical and emotional activity.

What is Ventricular Tachycardia?

In VT the ventricles start beating at an abnormally fast, regular rate. Because the ventricles are beating rapidly the heart does not work as efficiently.

Symptoms of VT may include:

- palpitations
- feeling tired
- shortness of breath
- dizziness or light-headedness
- chest pain or tightness

If you have an ICD it may administer shock treatments to treat VT.

Where is the Catheter Ablation performed?

The procedure takes place in a room similar to that of an operating theatre called a Cardiac Catheter Lab.

How is the Catheter Ablation performed?

The procedure may be done under general anaesthetic, which you will be given drugs for so that you fall asleep. You will lie down on the x-ray table with a pillow and a physiologist will place some stickers on your chest, a blood pressure cuff on your arm and a probe on your finger.