

Helpful websites

The following are websites that provide further information for patients. While we recommend these sites we cannot be held responsible for information that you collect from them:

www.arrythmiaalliance.org.uk

www.bhf.org.uk

www.dvla.gov

www.guidant.com

www.medtronic.com

www.sjm.com

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 Right Ventricular Outflow Tract Tachycardia (RVOT)

The Royal Bournemouth Hospital,
Castle Lane East, Bournemouth, Dorset, BH7 7DW


Author: **Sharon Cassidy** Date: **December 2021** Version: **Three**

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t: 01202 303626 w: www.uhd.nhs.uk

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This booklet is to help you understand about your catheter ablation for RVOT.

On the morning of the procedure:

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

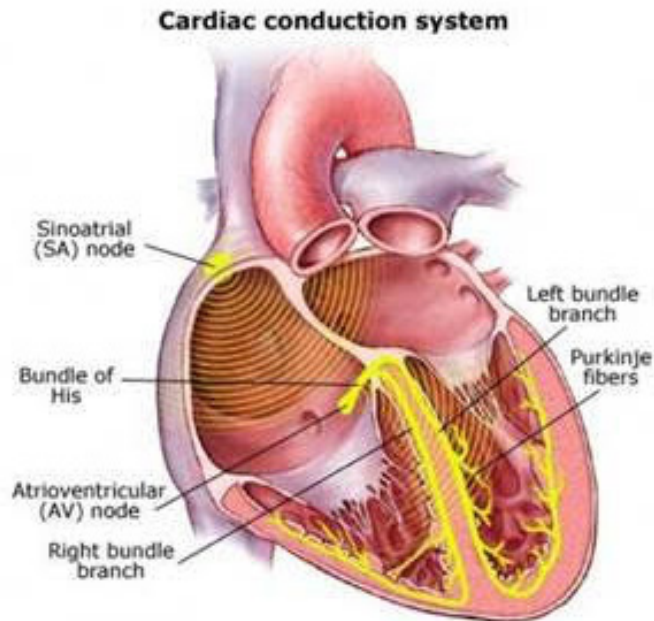
You will receive instructions on when you should stop eating and drinking prior to admission. A small sip of water to swallow tablets is allowed.

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

The heart consists of two pumps side by side. One pump circulates blood around the lungs before emptying into the second pump which circulates blood around the body. Each pump consists of two chambers - the atrium and the ventricle.



- 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. They may ask that you have a portable heart monitor fitted as an outpatient following the ablation.

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 attend the Accident and Emergency Department or call **999**.

Further support and advice

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

If you do not get any response, please leave a message as the answerphone is checked frequently and your call will be returned as soon as possible.

Please note that 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 dial **999** and ask for an ambulance.

How is the Catheter Ablation performed?

You will be awake during the procedure but will be given sedation that may make you feel drowsy. If it is uncomfortable at any time during the test or you feel very anxious please let the nurse or doctor know.

You will lie as flat as you can on the x-ray table with a pillow. The physiologist will place some stickers on your chest, a blood pressure cuff on your arm and a probe on your finger. 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.

Once you are asleep or feeling sleepy both your groins will be cleaned with antiseptic solution and a local anaesthetic will be injected here. This will 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. The wires are guided into position using x-ray equipment. The x-ray machine will scan you and take 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 usually 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 required 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 continue as before.

When the doctor has located the areas of abnormal electrical activity the ablation will be performed. This is usually done by

applying radiofrequency energy which will heat the tip of one of the wires positioned in your heart. You will be required to stay still during this time and you may be aware of a slight discomfort in the chest. Once the delivery of radio frequency energy is stopped, this discomfort usually disappears. It is often necessary to repeat this process a number of times and there is often a wait of up to 20 minutes to ensure that the procedure has been successful. The doctor will then remove the wires and the small plastic tubes in the groin. A small plaster will then be placed on the wound. You will then be transferred back to the ward and monitored in your recovery from the procedure.

Are there any complications?

Although the following complications must be mentioned, the risk of them happening is extremely small. 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 (1:100 or 1% 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 (1:200 or 0.5% chance)
- The procedure may cause complications such as heart damage or a stroke (1:1000 or 0.1% chance)

Before the ablation

A hospital gown will be provided for you to wear. 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 as well as the risks or complications that may be associated with it. You will be asked to sign a consent form to allow the ablation to go ahead and be seen by an anaesthetist before the procedure.

After the Ablation

The nurse will check your blood pressure, pulse and wound in the groin. You will continue to be observed closely for a couple of hours, during which 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.

An electrocardiogram (ECG) will be taken following your procedure. Your doctor or arrhythmia nurse will discuss the catheter ablation with you and you should be able to go home later that evening if you have someone who can stay with you overnight.

Going home

Please consider the following points when discharged 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. Generally 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 medication as normal unless the doctor has told you not to
- It is not unusual to feel tired for some time after the procedure

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 situated 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 Right Ventricular Outflow Tachycardia?

In RVOT the ventricles start beating at an abnormally fast, regular rate. Because the ventricles are beating rapidly the heart does not work as efficiently. This can cause symptoms of weakness, dizziness, chest pain or shortness of breath. Right Ventricular Outflow Tachycardia is different to VT as it happens in a structurally normal heart and is well tolerated by the body.

Symptoms of RVOT may include:

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

Catheter Ablation may be performed in an attempt to cure RVOT by damaging very small areas of tissue.

Where is the Catheter Ablation performed?

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