

Additional Notes

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Catheter Ablation for Supra-ventricular Tachycardia

Cardiac Intervention Unit

This booklet is to help you understand
about your Catheter Ablation
for Supra-Ventricular Tachycardia.

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Important Points to Remember

Please read this booklet carefully. If you have any further questions or concerns contact the Arrhythmia Nurse Specialists on **0300 019 6154** or email **arrhythmia.nurses@uhd.nhs.uk**.

- Your admission letter will give you details of where you will be admitted.

On the morning of the procedure:

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

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.

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.

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. The second pump circulates blood around the body. Each pump consists of two chambers, the atrium and the ventricle.

Additional Notes

What is Supra-Ventricular Tachycardia and Catheter Ablation?

The heart rhythm disorder that you have is Supraventricular Tachycardia (SVT) and this comes from the upper chambers of the heart. Symptoms of SVT may include:

- Palpitations
- Feeling tired
- Shortness of breath
- Chest pain or feeling of tightness in the chest
- Dizziness or light-headedness

SVT can cause people to feel quite unwell but be reassured that this is not a life threatening condition. SVT commonly results from an extra electrical connection between the upper and lower chambers. This extra connection may either be very close to the normal connection (the AV Node) or further away from this.

Catheter Ablation may be performed in an attempt to cure SVT by damaging very small areas of tissue around the extra electrical connection.

Where is the Catheter Ablation performed?

The study takes place in a special room, which looks like an operating theatre and is called a catheter lab or 'cath lab'. In this room with you will be:

- The cardiologist who will perform the test.
- Two nurses, one to look after you and one to help the doctor.
- A radiographer who takes the x-ray films.
- A cardiac physiologist who will monitor your heart while you have the test.

If you have any questions about your ablation procedure you may contact:

The Arrhythmia Nurse Specialists

on **0300 019 6154**

Monday to Friday 9.00 to 5.00pm.

Are there any complications?

Although the following complications must be mentioned, the risk of them happening is extremely small. Please do discuss any particular concerns that you have prior to the procedure.

- 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, 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 very occasionally a small operation is required.
- You may get palpitations during this test, but as your heart is being monitored we will notice this and treat you as necessary.
- If the extra connection is near to the normal connection (the AV node) there may be an increased risk of inducing the need for a permanent pacemaker to be fitted. This risk is 1 in 200 (0.5%). This risk is not present if the extra connection is away from the normal connection.
- If the Doctor feels there is a particularly high risk in your case of creating the need for a pacemaker, the ablation may not be performed and this will be discussed with you.
- Very rarely the insertion of the catheters into the heart may cause heart damage or stroke but this risk is less than 1 in 1,000 (less than 0.1%).

- If an emergency situation occurs during the procedure, we will do whatever is possible to treat it. Although extremely rare, this emergency treatment could include 'open-heart surgery'.

Your Doctor feels that the benefits that can be gained from performing this procedure outweigh any of the risks involved.

Internet Sites

The following are web sites that provide information for patients. Whilst we recommend these sites, we cannot be held responsible for information that you collect from them. To locate the site connect to the addresses below:

www.arrythmiaalliance.org.uk

www.bhf.org.uk

www.dvla.gov

www.guidant.com

www.medtronic.com

www.sjm.com

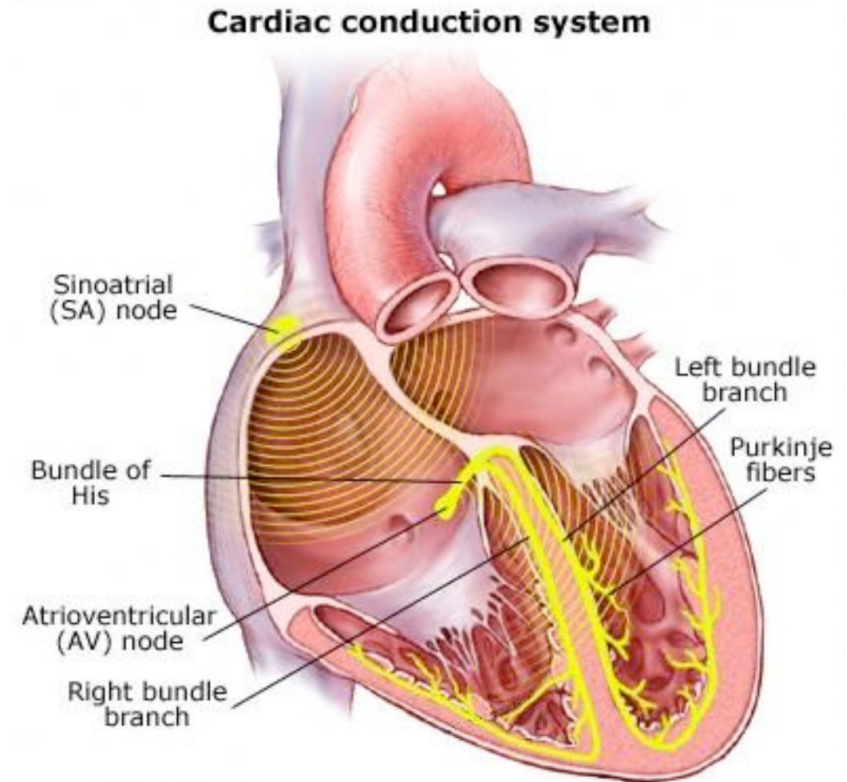
The Bournemouth and Christchurch Heart Fund

The Bournemouth and Christchurch Heart Fund

(charity no. 216161) was set up in 1989 for the purpose of developing cardiac services which would not be supplied through National Health Services resources. Several of the recent purchases of equipment since the cardiac department was established have been provided or supported through non-NHS money. In order to continue to maintain and update our facilities, donations are greatly appreciated.

If you would like to contribute, cheques should be made payable to "The Bournemouth and Christchurch Heart Fund" and sent to the Cardiac Department (Dr Rozkovec's office).

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). The SA node is sited 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 at 50 - 100 times per minute at rest. The heart beats regularly and slowly at rest and faster during physical and emotional activity.

Very occasionally during a study the heart may go into a fast rhythm, which needs to be stopped. In such instances an electrical shock may be required to restore the heart to its normal rhythm. This may sound frightening, but you will not be aware of this as you will be given sedation before the shock. This is a rare occurrence, and once the heart has been restored to its normal rhythm, the study will then continue as before.

In order to induce an abnormal fast rhythm it may be necessary to give you a drug to speed up the heart. This will be given through the plastic tube in your arm. You may be aware of your heart racing and feel flushed for a few minutes.

When the Doctor has located the extra electrical connection responsible for producing your abnormal heart rhythm, the ablation can 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 radiofrequency energy is stopped, the discomfort usually disappears. It is often necessary to repeat this process a number of times and there is often a waiting time of up to 20 minutes to ensure that the procedure has been successful.

After the procedure is finished, the Doctor will remove the wires and the small plastic tubes in the groin. A small plaster will then be placed on the wound. You will usually be transferred to a recovery area for close observation before being transferred back to the ward.

Prior to 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. If you wear dentures they can remain in place providing they fit well.

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

After the Ablation

When you go back to the ward, the nurse will check your blood pressure, pulse and wound in the groin.

You will need to lie flat for approximately two hours to allow the groin 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 may be provided with something to eat. An electrocardiogram (heart tracing) will be taken and you will be encouraged to rest.

Your Doctor or Arrhythmia Nurse will discuss the results of your catheter ablation later in the day and you should be able to go home by early evening.

Going Home

- You must have someone to collect you from the ward and someone staying with you for the first night, just in case your wound bleeds or you begin to feel unwell.
- We do not advise using public transport.

- The Driving and Vehicle Licensing Agency (DVLA) have guidelines in relation to patients who have received an ablation. Generally you cannot drive for 2 days following ablation. If you drive for a living or hold a Group 2 (bus/lorry) licence please check with 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 should continue to take your medications as normal, unless the Doctor has told you not to.
- You may be asked to take Aspirin for up to one month following the Catheter Ablation.
- You will be seen in the outpatient clinic approximately two to three months following the procedure.

You may experience some extra or missed heartbeats; these are quite common and may last for a few months. However, if you experience your original palpitations again it is important to try and have a heart tracing (ECG) performed while experiencing these symptoms. This can be performed either at your GP surgery or by attending the Accident and Emergency Department. 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.

How is the Catheter Ablation performed?

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

You will lie as flat as you are able on the x-ray table, with a pillow. The Cardiac Physiologist will place some stickers on your chest, a blood pressure cuff on your arm and a probe on your finger. This will enable the heart rate, blood pressure and oxygen levels to be observed throughout the study. An oxygen mask may also be placed on your face.

Your groin will be cleaned with antiseptic solution and local anaesthetic will be injected here. The local anaesthetic will cause a stinging sensation for a few moments and the groin will feel numb. The Doctor will then place some tubes in the main vein of your groin. This should not be painful but you may feel some pushing when the tubes are inserted.

Long thin wires will be passed through the tubes. These wires will then be used to record electrical signals from within the heart. The wires are guided into position using x-ray equipment. The x-ray machine will move around you to take pictures from different angles. As with all x-rays, if there is any chance 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's electrical system. This is done by recording the electrical signals on a computer. A special machine (an artificial pacemaker) is used to give the heart small electrical impulses to make the heart beat at different rates. You may be aware of your heart racing or missing beats, but it is the Doctor inducing this and you should not be worried. However, if you feel uncomfortable, please let the Doctor or Nurse know.