# Catheter Ablation for Atrial Flutter

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

Author: Arrhythmia Nurses Date: December 2021 Version: Seven Review date: December 2024 Ref: 489/21

t: 01202 303626 w: www.uhd.nhs.uk : @UHD\_NHS : @UHDTrust : @uhd\_nhs **Cardiac Intervention Unit** 

This booklet is to help you understand about your Catheter Ablation for Atrial Flutter.

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

У : @UHD\_NHS 📑 : @UHDTrust 🧕 : @uhd\_nhs

**Additional Notes** 

# **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 do not miss any doses of your blood thinning anticoagulants, for example your Warfarin or Direct Oral Anticoagulants (DOACs) such as Apixaban, Dabigatran, Edoxaban and Rivaroxaban, in the time leading up to your procedure.

If you think you have missed a dose or 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**

**Catheter Ablation for Atrial Flutter** 

# **Catheter Ablation for Atrial Flutter**

# What is Atrial Flutter and Catheter Ablation?

The Doctor has found that you experience an abnormal heart rhythm arising from the top chambers of the heart called Atrial Flutter. You may have episodes of this rhythm as well as normal heart rhythm or you may be in Atrial Flutter all of the time. Atrial flutter can cause the heart to beat very quickly and can cause symptoms such as:

- Palpitations
- Feeling tired
- Shortness of breath
- Dizziness or light-headedness
- Chest pain or tightness.

In most cases of Atrial Flutter there is a specific area of tissue in the top chamber that is responsible for this rhythm. This area forms the 'flutter circuit' where rapid electrical signals travel, causing the top chambers to beat very quickly.

Catheter ablation may be performed in an attempt to cure Atrial Flutter by damaging this area of tissue and therefore preventing this circuit of electrical activity

# 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 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**.

If you have any questions about your ablation procedure 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 ablation.

- There will be some minor bruising and short-lived tenderness around the wound site in your groin.
- There may be damage to the blood vessels in your groin, 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 procedure 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.
- 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.arrhythmiaalliance.org.uk

www.bhf.org.uk

www.dvla.gov

www.guidant.com

www.medtronic.com

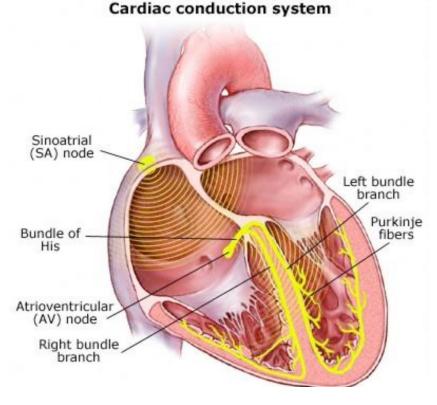
www.sjm.com

# 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. Once the wires are positioned, the Doctor will look at your heart rhythm disturbance by recording the electrical signals on a computer. If at any stage during the procedure you feel any discomfort you must let the Doctor or Nurse know. Catheter ablation for atrial flutter is based upon a detailed knowledge of the hearts anatomy and is often successful even if you are in a normal heart rhythm at the time of the procedure.

Therefore it is not necessary for the Doctor to stimulate the heart into atrial flutter in order for a successful ablation to be achieved.

Very occasionally during a procedure 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. You will not be aware of this as you will be under heavy sedation. This is a rare occurrence, and once the heart has been restored to its normal rhythm, the procedure will then continue as before.

When the Doctor has located the areas of abnormal electrical activity between the heart valve and a large blood vessel in the top right chamber of the heart, 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 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.

### 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. 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. Rarely ablation procedures have to be performed under general anaesthetic and if this is required you will be seen by an Anaesthetist before the procedure.

# **After the Ablation**

When you get 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 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 should continue to take your medications as normal, unless the Doctor has told you not to.
- You will be seen in the outpatient clinic approximately two to three months following the procedure.
- Prior to this you may be asked to wear a heart monitor so we can analyse your heart rythem

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 whilst 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.

# 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 test or you feel very anxious 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 then 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.