



A guide to...

Catheter ablation for Atrial Flutter

Patient Information

How to contact us

Cardiac Day Ward, AAU level 2
Watford General Hospital
West Hertfordshire Hospitals NHS Trust

Tel: 01923 244366 Ext: 3365 **Email:** westherts.cardionursing@nhs.net

If you need this leaflet in another language, large print, Braille or audio version, please call **01923 217 198** or email westherts.pals@nhs.net



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This leaflet explains the atrial flutter ablation procedure and why your doctor has recommended this for you. At the end of this leaflet, you will find a list of important points to remember and also some contact numbers for further information, advice and support.

What is Atrial Flutter?

Atrial Flutter is a common abnormal heart rhythm (arrhythmia). It arises from an abnormal electrical circuit in the upper chambers of the heart (atria), most commonly the right atrium causing a rapid heartbeat. This can cause symptoms of palpitations, shortness of breath, light-headedness, or fatigue. Sometimes patients have no symptoms at all. Atrial flutter can occur intermittently, or the patient can permanently be in this rhythm. Atrial flutter is also associated with a risk of stroke so you may be on a blood thinning medication as a consequence of this.

Catheter ablation for atrial flutter

This is an invasive procedure performed under local anaesthetic and strong sedatives. Small tubes are placed into a vein at the top of the right leg, through which long thin wires, known as catheters, are passed up into the heart into specific locations under fluoroscopy (video x-ray) guidance. These catheters can be used to stimulate the heart tissue, revealing the area responsible for atrial flutter. Radiofrequency energy is then delivered from the tip of the catheter to 'ablate' this area. Ablation burns the tissue, creating scar tissue that prevents any rogue electrical signals from conducting through to the otherwise healthy conduction system.

Who may benefit from ablation of atrial flutter?

Patients with symptoms can expect an improvement in quality of life by a reduction in symptoms or cessation of medication that might be causing side effects. Patients with atrial flutter who don't have symptoms are unlikely to see any symptomatic benefit from ablation, but it may theoretically reduce the risk of stroke and need for blood thinners.

How successful is catheter ablation?

Almost 90% of patients will be successfully treated, often allowing cessation of certain medications. Approximately 30% of individuals however go on to develop a different arrhythmia called atrial fibrillation, which can also be treated by medication or ablation.

What happens before the procedure?

- Once you have decided to have ablation, your cardiologist will explain the procedure to you in detail, go through the potential risks and benefits.
- If you are not already taking an oral anticoagulant blood thinner such as Warfarin, Dabigatran, Rivaroxaban, Apixaban or Edoxaban, in many cases this medication will be recommended, ideally to start six weeks before the procedure and beyond.
- If you are taking Warfarin, your INR level should be between two and three for a minimum of four weeks before the procedure. You should carry on taking this and NOT stop it unless told otherwise by your cardiologist.

- A week prior to your procedure date you will be asked to attend a pre-assessment in the Cardiac day ward (CDW) at Watford General Hospital. At this visit you will be asked some routine questions, you will be examined briefly, an ECG and blood tests will be taken. **Please bring an up-to-date list of your current medications and note any allergies you might have.** You will be given further instructions in preparation for your procedure, and you will have the opportunity to ask any questions.

What happens on the day of my procedure?

- Do not eat anything after midnight on the procedure day. You may drink clear fluids until 7.00am. Take your normal medications except those listed on your appointment letter **and bring all your medications with you.**
- On arrival, a nurse will complete a checklist of questions/observations with you. A small tube called a cannula will be placed into a vein in your arm (for intravenous medication).
- The cardiologist will rediscuss the procedure with you and if you are happy to go ahead, you will need to sign a consent form. You may also be asked to sign a form stating that you have taken your blood thinners as advised.

Please note that all patients for the day are admitted at the same time to allow the doctors to plan the day effectively. Whilst we try to ensure that you do not wait too long, we cannot guarantee a start time as procedure times are unpredictable, as are emergencies. The CDW team will keep you updated.

What happens at the start of my procedure?

A nurse will transfer you from the Cardiac Day Ward to the Cathlab (operating theatre). Once inside, you will be greeted by the team and be asked to lie flat on a table. A cardiac physiologist will attach leads from your chest and extremities to monitors and fix a blood pressure cuff to your arm. A scrub nurse will then prepare the top of your right leg, including shaving and applying cleaning solution, and cover you with a sterile blue sheet from the neck down. Intravenous sedation and pain relief may be given at this point.

The doctor will instil local anaesthetic to the right groin. Thin tubes (sheaths) are then inserted into the main vein. Catheters (specialised flexible wires) are passed through these tubes into specific locations within the heart under X-ray guidance. Once the catheters are in place, they are used to test the heart to determine the location of the flutter circuit. An ablation catheter is then used to burn away the abnormal area causing flutter. You may feel some heating in your chest and shoulder. Post-procedure, all equipment is removed under manual pressure, and you will be transferred back to recover on CDW. The procedure usually takes between one to two hours.

What will happen after the procedure?

Once fully recovered, you will be given something to eat and drink. You will need to remain on bed rest on a monitor for approximately four hours after the procedure to reduce the risk of bleeding from your groin. Regular checks of your vital signs and puncture sites will be carried out at that time. Your cardiologist will discuss the outcome of your procedure, check your recovery before discharge and discuss any medication changes.

If you have been taking blood thinning medication then you will need to continue taking this the evening after the procedure, unless told otherwise.

To safely discharge you to your home, please ensure someone can pick you up and stay with you at least 24 hours after the procedure.

What are the common and serious complications?

Common but not serious

Pain

- During ablation, pain or a heating sensation may be felt in the chest or shoulder blade. This is usually controllable with pain relief medication.

Bleeding (haemorrhage), groin swelling or bruising (haematoma)

- It is common for a little blood to ooze from the groin immediately after the procedure, which usually stops. Bruising is common due to blood tracking under the skin. This does not need treatment but may take several weeks to resolve.

Uncommon but more serious complications

Groin problems (haematoma and false aneurysm)

- In one in 200 cases there is more bleeding than expected from the groin. Tight bandages or a pressure clamp may be used to control the bleeding. This may be because the artery next to the vein was inadvertently punctured. The bleeding may spread under the skin and form a blood clot making a lump under the skin called a haematoma. Very rarely an operation is needed to repair the blood vessel. Most groin problems are treated before you go home, but swelling can occur once you are home. You should see a doctor should this happen.

Puncturing a hole through the heart (pericardial effusion/tamponade)

- Rarely (less than one in 1000) the heart wall is punctured, causing blood to leak out into the surrounding sac. In the majority of cases this will resolve on its own, however if the bleeding does not stop, it must be drained. A thin tube is introduced under local anaesthetic through the skin in the front of the chest and placed in the sac to drain the blood. This drain is removed after 24-48 hours.

Permanent pacemaker

- In less than 1:200 cases, the electrical system of the heart tissue is damaged during the ablation. If this occurs, a pacemaker is required to correct this.

Stroke

- This is a very rare complication that can occur during or in the weeks after the procedure. It happens in less than one in 200 cases and occurs because a small clot or a small bubble of air blocks the blood supply to a part of the brain. In most cases, it will get better within 24 hours to a week. However, it can have permanent effects such as reduced mobility on the one side of the body or difficulty with speech.

Allergic reactions (anaphylaxis)

- Rarely patients may develop a severe reaction from the medication, equipment or from the monitoring stickers that have been placed on the skin. If this happens, medication can be given to counteract the allergic reaction.

Death

- The risk of dying from this procedure or any of its complications is less than one in 10,000.

What can I expect when I go home?

- It is normal to experience a little chest discomfort for a few days after the procedure. This usually resolves but simple pain killers can be taken for this.
- If your puncture site starts to bleed, then lie down to help slow the bleeding, and press firmly on the puncture site continuously for 10 minutes. If the wound continues to bleed despite this, go to your nearest A&E for assessment.
- Once you get home you will need to rest for a few days up to a week after the procedure. You can go about your normal routine but there are a number of activities that should be avoided to allow the groin to heal:
 - Avoid lifting heavy objects for seven days.
 - Avoid rigorous exercise for two months.
 - The DVLA recommends that you do not drive for two days. If you have HGV licence driving may resume after two weeks provided there is no other disqualifying condition.
 - You should not fly for seven days.
- You will be seen routinely in the Arrhythmia clinic outpatients usually with a 24-hour heart monitor beforehand with a view to reviewing your medications. Most patients are discharged at that point.

What if I have an atrial flutter after my procedure?

In one in 20 cases, the tissue from the ablation can heal, leading to recurrence of flutter. This can easily be treated by repeat ablation to “spot weld” the area that has recovered.

If your symptoms return, then inform your GP or your cardiologist. It would be helpful to get an ECG whilst you are having symptoms to confirm recurrence and bring it to the **consultation. While you are waiting for the consultation, the medication that you had been taking before the procedure can be restarted.**

What symptoms should make me seek urgent medical help?

If you experience any the following and this is of concern to you, then we urge you to contact us (contact details below) or your GP:

- Increased swelling, pain or bleeding from the groin
- Increased shortness of breath
- Severe chest pain.

If you get admitted to hospital within the first three months, it is very important that you notify your cardiologist.

How to find Cardiac Day Ward

The Cardiac Day Ward is open 8:00-6:30 Monday to Friday. Cardiac Day ward can be found in Acute Admission Unit (AAU), on level 2 of the AAU's block. It is signposted from all the entrances to the hospital.

If you cannot contact the arrhythmia specialist nurse, the cardiac nurses on the Cardiac Care Unit (AAU Level 3) will be able to advise you at any other time on 01923 217159.

Arrhythmia Specialist Nurse

Tel: 01923 244366 Ext: 3365

Cardiac Day Ward

Tel: 01923 436636

(where your pre-assessment, procedure and recovery will take place)

For further advice / support contact:

Arrhythmia Alliance

Tel: 01789 450787

Email: info@arrhythmiaalliance.org.uk

Arrhythmia alliance offers information and support to individuals with cardiac arrhythmias.

The British Heart Foundation

Tel: 0300 330 3311

Email: www.bhf.org.uk

British Cardiac Patient Association

Tel: 01949 837070

Email: www.bcpa.co.uk

DVLA Medical Enquiries

Cars, motorcycles

Tel: 0300 790 6806

Buses, coaches, lorries

Tel: 0300 790 6807