Oxford University Hospitals NHS Foundation Trust

Ablation for atrial fibrillation (also known as pulmonary vein isolation)

Information for patients



Your doctor has offered you a catheter ablation for your atrial fibrillation (AF). This procedure involves the creation of precise, controlled lesions inside the heart in order to electrically isolate the pulmonary veins and prevent the development of atrial fibrillation.

The procedure is either performed under general anaesthetic (where you will be asleep) or sedation (where you feel drowsy and may fall asleep). Your cardiologist will discuss which is the most suitable for you.

Before having the ablation you will need to take blood-thinning treatments such as Warfarin or another oral anticoagulant medication. You will need to take these for at least a month before and for several months after the ablation. These thin your blood and help to minimise the risk of blood clots.

What happens during the ablation procedure?

You will need to come in to the Cardiac Angiography Suite at the John Radcliffe Hospital. This is on Level -1 in the Oxford Heart Centre.

When you arrive on the ward you will be asked to change into a hospital gown and will be asked to wait on a bed. The cardiologist and nurse will come and see you to prepare you for the procedure. They will be able to answer any questions you might have.

If you are having a general anaesthetic the anaesthetist will also come to see you to explain the risks of having a general anaesthetic and to check you are fit to have the procedure.

So that we can monitor your blood pressure during the procedure, the anaesthetist will insert a very small needle into the artery in your wrist (usually your right wrist).

Immediately before the procedure you will have a special scan of your heart called a transoesophageal echocardiogram (TOE). This involves passing a small flexible tube through your mouth, into your oesophagus (gullet) which will be performed whilst you are asleep. This is a diagnostic test that uses sound waves to look at the inside of your heart and make sure there are no blood clots.

The ablation procedure involves passing a number of small, flexible tubes in to the vein at the top of your leg. Through these tubes we pass fine wires, called catheters. The cardiologist will be able to see where the catheter is going using a type of X-ray called fluoroscopy.

If you have had sedation, rather than a general anaesthetic, you may feel a small sting from the local anaesthetic injections we will give you at the top of your leg. You may also be aware of the catheters being positioned inside your heart, but this should not be painful. If you do experience any pain at any time, we can give you more pain relief to help. Once the catheters are in the correct position, we use a special piece of equipment to make a 3-D map of your heart. We can then begin the ablation procedure. We will either use radiofrequency therapy (radio waves that create heat) or cryotherapy (freezing) to create the lesions.

Once the procedure has finished, the catheters and tubes (including the needle in your wrist) are removed. We will apply pressure to these areas to stop any bleeding. You will have a small plaster applied to the top of your leg and on your wrist.

You will be taken back to the ward where you will need to rest in bed for at least two hours. If your procedure is performed in the morning then you should be able to go home the same day, if your procedure is performed in the afternoon you may require an overnight stay. You will need to be accompanied home after your procedure and someone to stay with you for 24-hours.

Benefits

The aim of ablation for atrial fibrillation is to achieve rhythm control (keep the heart in normal rhythm) to significantly improve symptoms, which may reduce the need to take some medications.

Atrial fibrillation ablation is usually successful in up to 80% of people with persistent atrial fibrillation and up to 85-90% of people with paroxysmal atrial fibrillation (episodes of AF).

However, 30% of people with paroxysmal atrial fibrillation and 50% of people with persistent atrial fibrillation will need to have this procedure more than once.

Risks

There are several side effects associated with catheter ablation. Some common side effects are:

- bruising at the top of the leg
- mild chest discomfort
- a sore throat
- palpitations.

These will usually only last for a short while.

Some less common risks are:

- Exposure to ionising radiation during the procedure (x-rays)
- Bruising, discomfort in the groin, mild chest discomfort, a sore throat and palpitations
- Femoral haematoma occurs in 1 in 50 or 2%
- Femoral vascular injury requiring minor surgical repair 1 in 100 people or 1%
- Risk of pericardial effusion (bleeding around the heart) requiring a temporary drain to be inserted during the procedure 1 in 50-100 people or 1-2%
- Damage to the atrioventricular node requiring a permanent pacemaker <1 in 100 or <1%
- Phrenic nerve damage < 1 in 100 or <1%
- Oesophageal damage from TOE <1 in 100 or <1%
- Risk of a transient ischaemic attack or stroke approximately 1 in 200 people or 0.5%
- Risk of a pulmonary vein stenosis (narrowing of the veins) requiring treatment is 1 in 500 or 0.2%
- Urgent open-heart surgery 1 in 500 or 0.2%.
- Gastroparesis (poor stomach motility) 1 in 1000 or 0.1%.
- Atrial oesophageal fistula 1 in 1000 or 0.1%
- Risk of a fatal complication is estimated to be 1 in 1000 or 0.1%

Your cardiologist will only suggest that you have a catheter ablation if they feel that the benefits of the procedure clearly outweigh the risks.

Alternatives

Your doctors have recommended that this is the most appropriate treatment for your condition. If you wish to discuss alternatives, please talk to the cardiologist or arrhythmia nurse before you sign the consent form.

After the catheter ablation

Once you are fully awake, you can eat and drink. You should be able to go home the same day with a relative or friend. In some cases an overnight stay may be required.

Take anticoagulation for a minimum of 6-weeks after your ablation or lifelong if you have been advised too.

We recommend that you do not drive for one week afterward the procedure, although the DVLA stipulates a two day driving ban post ablation (6 weeks for HGV drivers).

It is not unusual to have your atrial fibrillation symptoms during the first few weeks after the ablation. You can contact the arrhythmia nurses for advice and your discharge information booklet will provide more detailed information about these symptoms. You may need to see your GP to obtain an electrocardiogram (ECG) which can be emailed to the arrhythmia nurses for further advice.

Fax: 01865 228994

orh-tr.arrhythmianurses@nhs.net

Some chest pain is common following the procedure and will usually resolve within a few days.

Please make sure that you have been given the leaflet 'Discharge advice after atrial fibrillation ablation'.

If you have symptoms that concern you please contact the arrhythmia nurses. If you feel very unwell you should go to your local emergency department to be assessed.

You will be seen in the outpatient clinic about three months after the procedure.

How to contact us

Cardiac Angiography Suite Day Case Unit

Tel: **01865 572 616** (Monday - Friday, 7.30am - 9.00pm)

Cardiology Ward

Tel: **01865 572 676** (24 hours)

Arrhythmia Nurses

Tel: 01865 228 994

(Monday - Friday, 8.00am - 5.00pm)

We have an answerphone for non-urgent queries, please leave a message and we will call you back.

Further information

Atrial Fibrillation Association

www.heartrhythmalliance.org/afa/uk/

Please note:

The figures quoted in this document are average figures for all cases. Your cardiologist will discuss with you any risks that are more specific to you before the procedure.

The department where your procedure will take place regularly has professional observers. The majority of these observers are health care professionals, qualified or in training and on occasions, specialist company representatives. If you do not wish visitors to be present during your procedure please inform a doctor or nurse.

Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

Author: Cardiac Directorate July 2022 Review: July 2025 Oxford University Hospitals NHS Foundation Trust www.ouh.nhs.uk/information



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