

Atrial Flutter

Atrial flutter is an abnormality in the rhythm of the heart (arrhythmia) where the atria beat very rapidly at around 250-300 beats per minute and, unlike in atrial fibrillation (AF), atrial flutter is a more organised electrical disturbance which generally originates in the right atrium in most patients.

The AV node is unable to conduct all these atrial impulses to the ventricles. It only allows a proportion of them through, creating an often-regular heart rate of around 100-150 beats per minute. The main goal in the treatment of atrial flutter is to control the rhythm itself, either by restoring normal heart rhythm or normal heart rate and the prevention of complications due to an increased risk of stroke from potential clot formation.

Symptoms

Atrial flutter is often experienced with a sudden onset and can resolve in many cases without any treatment or intervention, lasting anywhere from a few minutes up to days or weeks at times. In some patients it can be a permanent rhythm. Many patients report experiencing symptoms such as:

- Light-headedness
- Dizziness
- Chest pains
- Pounding heart or palpitations
- Rapid breathing
- Shortness of breath
- Fainting episodes (*In rare cases*)

What are the risks involved in an Atrial Flutter ablation?

As with all procedures, atrial flutter ablations carry their own risk profiles that can range from common occurrences, through to uncommon and rare instances. All Risks should be taken into consideration when considering an Atrial Flutter ablation to determine if the procedure is an appropriate treatment option for yourself during consultation with your treating cardiologist.

In recommending this procedure, your doctor has made has determined that on balance, the benefits and risks of the procedure outweigh the benefits and risks of not proceeding. As such, your doctor believes there is a net benefit to you going ahead and that the procedure should be successful overall.

Common risks and complications can include but are not limited to:

- Bruising to the surgical access site/puncture site and surrounding tissues that can take weeks to resolve completely in some instances.
- Scratchy throat if the anaesthetist places a breathing tube
- Minor chest discomfort for a week or so following

Rare risks and complications (<1% of cases) can include but are not limited to:

- Blood pooling around the heart (tamponade) that requires immediate drainage or surgical intervention in extreme cases.
- Stroke
- Damage to an artery in the groin that can require repair in some cases.

Radio Frequency Ablation

Radio frequency ablation for Atrial Flutter is a curative treatment available in the cardiac catheterisation laboratory (cath lab). The aim of this procedure is to locate and define the abnormal electrical circuit and create a small area of scar tissue in the abnormal electrical pathway to block transmission. This is achieved by introducing cardiac catheters into the right atrium, through the right femoral vein at the patient's groin. Radio Frequency energy is then delivered through the ablation catheter, to create scars that block the abnormal electrical pathway or focus initiating the arrhythmia.

The successful ablation of the pathway will prevent the recurrence of atrial flutter; restoring normal heart rhythm without the need for medications.

What Can I expect during the procedure?

Once checked into hospital for your procedure, you will be taken through an admission process where a detailed medical history is taken, preprocedural blood tests are collected and your body is prepared by shaving off hair around your groin, chest and back. This is undergone to ensure a sterile surgical field can be created to reduce any chance of infection and ensure that any cardiac mapping pads or electrodes can be appropriately placed on your chest or back in a way that is both effective for use and easy to comfortably remove.

You will then be taken to the anaesthetic holding bay where your anaesthetist will discuss their part in the procedure, your airway management process (as general anaesthetic is required) and discuss any queries or concerns you may have prior to the introduction of any medications. Upon entering the cardiac catheter laboratory, you will be prepared for

your procedure by the cardiac scientists who will position you on the table and apply mapping pads, defibrillation pads and various electrodes to your body prior to anaesthetic administration.

At the commencement of the procedure once you have been anaesthetised and surgically prepared by the staff assisting with the procedure, the doctor will insert two small access sheaths or tubes into your right groin under ultrasound guidance before passing a catheter up through your femoral vein and into the right atrium of the heart. The procedure is performed under x-ray guidance.

Once the catheters have been advanced into position, the heart is visualised onto a 3D model through the use of a mapping system before a series of electrical measurements are taken to pinpoint the exact location of the electrical impulses to be ablated. Once the doctor and the cardiac scientists are satisfied with the location of the position of the ablation catheter, radiofrequency energy is delivered and an area of scar is created to block the transmission of atrial flutter through the heart.

The entire procedure is generally reasonably quick, taking around 30-60minutes to complete in most cases. However, it can take longer in some instances.

At the completion of the procedure, the catheters are withdrawn and a 'figure of 8' suture is inserted to the access site in the groin to apply pressure and prevent any bleeding for 4 hours. The patient is then awoken from their anaesthetic and transferred to the post anaesthetic recovery area for observation before transferring to their room.

Once the catheters have been removed, patients have to remain flat without moving their hips/legs for up to 2-4 hours to prevent any bleeding postoperatively. Provided no complications are observed, patients are generally discharged either the same day or the following day.

Before Your Procedure

It is important that you fast prior to your procedure in line with your anaesthetists' instructions. Generally, a fast time of 6 hours for solid food and 4 hours for water is required in order to prevent any complications with the use of anaesthesia during your procedure.

For patients taking Ozempic, Trulicity, Saxenda, Wegovy or Mounjaro, the anaesthetic guidelines require you to continue your medication as normal, commence a clear fluid diet 24 hours prior to your procedure and completely fast for 6 hours immediately prior to your procedure to minimise the potential for anaesthetic related complications.

Note: Clear fluids includes: water, apple juice, broths, black coffee and black tea. Any non-transparent fluids such as milk, smoothies, juice containing pulp or soups are not considered clear fluids and can cause a delay in your procedure time if consumed.

After Discharge Process

Prior to discharge from hospital, patients are advised of any changes to their regular medications and advised of their follow up arrangement. This usually consists of a 24 hour heart rhythm monitor (a “Holter”) to assess the effectiveness of the, followed by an in-clinic appointment with Doctor Hunt in 6-8 weeks. If you are unsure if an appointment has been made, please contact the clinic to confirm a date and time for review to ensure all pre-appointment testing can be completed in a timely manner.