



University
Hospitals Sussex
NHS Foundation Trust

AV node ablation

Cardiac

Patient information

What is the AV node?

The AV node is like the body's natural pacemaker. A pacemaker sends electrical pulses to your heart to keep it beating regularly and not too slowly. The AV node works like the pacemaker to pass the signals from the top chambers (atria) to the bottom chambers (ventricles) of the heart. This signal keeps the heartbeat regular and safe.

When a person has Atrial Fibrillation (AF), their heart's electrical signals get mixed up. This leads to a fast and irregular heartbeat. This can make the person feel their heart racing (palpitations), and they might feel tightness in the chest or have trouble breathing.

Why do I need AV node ablation?

The aim of AV node ablation is to remove the heart's natural electrical signals, so your heart will only use signals from the pacemaker that has been fitted in an operation in your chest.

If your doctor suggested an AV Node ablation procedure, it means that your AF is not getting better with medicine OR you have had several AF ablations that did not work **OR** your doctor thinks you are not a good fit for an AF ablation.

You may hear your doctors and nurses call this the 'pace and ablate' approach. Before we do this, we will usually consider other treatments first.

There are two different options to cope with AF:

1. **Rhythm control.** Rhythm control tries to get your heart back to its regular beat using methods like DC cardioversion, medicine, or with the procedure called ablation.
2. **Rate control.** Rate control manages the speed of the ventricles of your heart but does not stop the atria from beating too quickly.

How will having the AV node ablation help me?

Having the ablation will mean that although your heart still has AF you will not feel the discomfort from this.

Are there any downsides to my procedure?

The downsides to this procedure can be:

- As the pacemaker will provide all the signals to your heart, you will drain your battery (also called generator) faster than someone only using their device occasionally. This may mean your pacemaker needs to be changed more often, which will involve a small operation.
- If the atria of your heart keep fluttering (beating irregularly), you will still need to take your blood-thinning medication to lower the risk of stroke.

What will happen during my AV node ablation procedure?

The procedure takes place in a room similar to an operating theatre, called Cath lab. It involves:

- Passing a fine tube, called catheter, into the heart via the vein at the top of the leg, through a small puncture in the skin.
- Having a local anaesthetic in the groin to make you feel comfortable.
- A heated catheter tip will be used to carry out the ablation (burn away the AV node) but you will be unlikely to feel any pain.
- Adjusting your pacemaker settings. This normally sets your heart to beat more slowly at around 30bpm (beats per minute). This will make it easier to do the procedure.

- Once the procedure is over the operator will then adjust your pacemaker's base rate to 90 beats per minute, this is until your 6 week pacing check .The base rate will be then reduced to 50-60 bpm depending your individual requirements. The increased rate is only required while the heart recovers from the Ablation.

We will check that the catheter is in the right place and that the ablation is going properly using x-ray guidance.

The procedure itself usually lasts up to half an hour, but often it takes less than that. Many people do not need any medications to make them relaxed or sleepy (sedative medications) as it is a quick procedure. If you think you may prefer to have sedation please tell the cath lab staff and the operator.

What will I do when I get home?

You may go home the day of the procedure, or the following morning, depending on the time of your procedure and your recovery.

Once you are home you may feel tired after the procedure and should rest if needed.

Please be aware

Avoid lifting heavy objects for 7 days.

Avoid intense exercise for 5 days, gradually returning to your normal level of exercise.

Try not to drive for 5 day (the DVLA recommends 2 days)

You should not fly for 7 days.

Most people can resume normal activities within two weeks but this can vary and for some it will take longer.

You may be able to return to work within a week of the procedure or you may need a few weeks to recover, depending on how you are feeling and the type of job you do.

Common complications (not dangerous)

Pain

Central chest pain can happen when the heat of the catheter gets too warm.

- Central chest pain can happen when the catheter gets too warm.
- Chest pain can happen during and after the procedure due to inflammation around the heart.
- Groin pain can happen from where the catheter was put in. Take regular paracetamol for a few days if you have pain.

Bleeding

Some blood loss from the groin straight after the procedure is common. In rare cases another procedure is needed to stop the bleeding.

Groin bruising/swelling

Bruising can take several weeks to disappear because of the medications you have taken to thin your blood.

Uncommon complications (can be serious)

Stroke (less than 1 in 1000 people)

This can happen if a small clot or air bubble blocks blood supply to a part of the brain.

Blood around the heart (1 in 500 people)

If a puncture is made to the heart causing blood to leak out, a drain may be needed to be inserted to remove the blood leakage.

Seek medical help via the hospital if you have:

- Increased swelling or increase pain from the groin where the catheter was put in.
- Increased breathlessness.
- Severe chest pain.

Useful contacts and websites

Arrhythmia nurses

01273 067041

uhsussex.rrhythmia.nurses@nhs.net

Cardiac Ward L6a

01273 664484

Arrhythmia Alliance

<http://www.rrhythmiaalliance.org.uk/>

British Heart Foundation

<https://www.bhf.org.uk/>

This information is intended for patients receiving care in Brighton & Hove or Haywards Heath.

Ref. number: 2428

Publication date: 12/2024

Review date: 12/2027

© University Hospitals Sussex NHS Foundation Trust Disclaimer:

The information in this leaflet is for guidance purposes only and is in no way intended to replace professional clinical advice by a qualified practitioner.

