

Atrioventricular (AV) Node Ablation for Atrial Fibrillation/Flutter

What is atrial fibrillation?

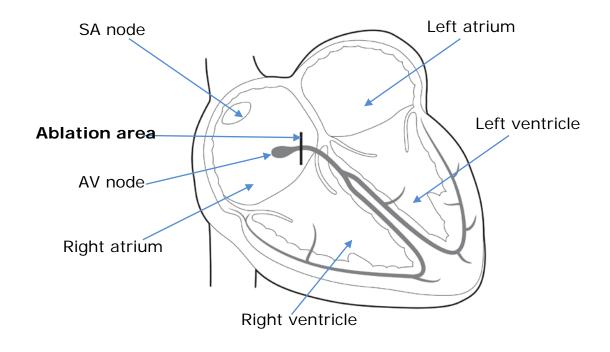
Normally your heart has a regular beat called normal sinus rhythm.

When you have atrial fibrillation or flutter there are many electrical impulses or signals coming from the atria or upper chambers of the heart. This causes your heart to beat fast and/or unevenly.

Atrioventricular (AV) Node Ablation along with a pacemaker implant is a treatment option for these heart rhythms.

What is the AV (atrioventricular) node?

The AV (atrioventricular) node is part of the heart's electrical system. It passes electrical signals from the heart's top chambers (atria) to the heart's bottom chambers (ventricles).



What is an AV node ablation?

During an AV node ablation, a special catheter or wire is used to cauterize (destroy) and block the abnormal signals. This prevents the abnormal signals from the atria (top chambers) from interfering with the ventricles (bottom chambers).

The atria (top chambers) will continue to beat unevenly and rapidly, but the ventricles (bottom chambers) will contract as a result of your pacemaker. The pacemaker will give the ventricles a normal and regular rate. This will relieve symptoms caused by atrial fibrillation/flutter.

What are the risks of an AV node ablation?

The risks vary with each person and are related to your health condition and type of arrhythmia.

Your doctor will explain your risks to you before the procedure and ask you to sign a consent form. Make sure you understand the risks and benefits of the procedure before you sign the consent form.

Possible risks include:

- bleeding from the vein at the puncture site
- bruising or infection at the puncture site
- small risk of stroke
- small risk of bleeding around the heart

How do I get ready for the procedure?

In the weeks leading up to your procedure you will:

- visit the Pre-Arrhythmia Clinic to meet with the nurse and have some blood work taken and an ECG done
- visit the thrombosis nurse regarding your blood thinning medication, if needed
- have blood work for an INR the day before your procedure, if needed

Where will I have my procedure?

Your procedure will be done in the Cardiac Arrhythmia Unit, also called the Electrophysiology (EPS) Lab.

This unit is at the Hamilton General Hospital. The EPS is be done by a specially trained doctor, called an electrophysiologist.



Where do I go when I arrive at the hospital?

Go to Patient Registration. After you have been registered, you will be directed to the Cardiac Arrhythmia Unit. You may bring 1 or 2 family members or friends to be with you before and after your procedure.

In the Cardiac Arrhythmia Unit:

- You will change into a hospital gown.
- An intravenous (IV) will be started in your arm.
- You will have hair clipped in your groin and chest areas.
- You will be given some sedation to help you relax.
- You may wear your glasses, hearing aids and dentures.
- You will be taken to the EPS Procedure Room.

What can I expect in the EPS Procedure Room?

A team of doctors and nurses who specialize in heart rhythms will greet you. They will be wearing operating room clothes. You will meet the doctor who will do the procedure. This team will be with you throughout the procedure.

The room is cool to protect the computers and special equipment.

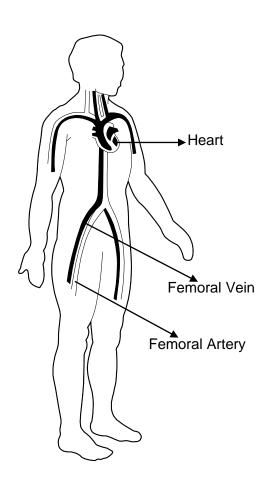
You will not receive a general anesthetic.

You will be given medication through your intravenous throughout the procedure to keep you comfortable.

If you are uncomfortable, let your nurse know.

How is an AV node ablation done?

- You will lie on a special table that is hard and narrow.
- You will be connected to an electrocardiography (ECG) monitor and a blood pressure cuff to monitor you during the procedure.
- You will also be connected to a number of sticky pads to help the doctor do the procedure safely.
- Clipped areas will be cleaned with an antiseptic.
- Sterile sheets will be placed over you. The staff will provide you with as much privacy as they can.
- The site will be injected with a local anesthetic or "freezing". This will sting for a few moments and then the area will become numb.
 You will feel pressure and movement at the site during the procedure, but should not feel pain.
- The doctor will put a needle into a vein in your groin. A small thin hollow tube called a sheath is inserted through the skin into the veins of your groin and neck.
- A wire/catheter will be put into your heart to destroy (cauterize) the AV node. These wires are very thin and flexible. The doctor watches an x-ray screen to guide the wires into your heart.



How is an AV node ablation done? (continued)

- When the procedure is done, the wire is removed. The puncture site seals itself so there is no need for stitches. Bandages are placed over the site where the wire was put in.
- An x-ray camera will move over you during the procedure, but will not touch you.
- It is very important that you do not move during the procedure. The sedation will help you to keep still.

This procedure can take up to 2 hours. If you are uncomfortable, let the nurse know.

What happens after an AV node ablation?

While you are in the hospital

- You will return to the Arrhythmia reception area to recover.
- You will feel sleepy. You may have trouble remembering some parts of the procedure afterwards. When you wake up these effects will go away.
- You will rest in bed for 4 hours. The head of your bed may be raised up to 30°.
- You will keep your leg straight and your head on the pillow for 4 hours.
- Drink fluids and eat while you are resting.

You must arrange to have someone drive you home from the hospital.

Do not drive for 48 hours.

Will I have to take any medications?

Yes. You will need to stay on your **blood thinner** medication because your atria (upper chambers) are still beating rapidly.

You may be able to stop or decrease the dose of any heart rate slowing medication you take.

Before you go home, talk about your medications with your doctor or nurse.

When you go home

- Although you may feel fine the next day, the effects of the sedation may still be with you. Do not operate heavy equipment or power tools. You may want to delay signing contracts or other financial decisions for that day.
- Limit your lifting to less than 4 kilograms or 10 pounds for the next 2 to 3 days.
- If you see blood on your bandage, place firm pressure on the area for 5 minutes. If bleeding continues, call your doctor or go to the Emergency Department.
- If you develop a lump under your bandage and it continues to get bigger, place firm pressure on the bandage. Then, call your doctor or go to the Emergency Department.
- You may remove your bandage the next morning.
- You may shower the next morning. Do not soak in water, such as a pool, hot tub or bathtub for the next 3 days.
- You can walk or do gentle exercises when you get home.
 Do not do strenuous exercise for the next 3 days.
- Ask your doctor when you will be able to return to work. The type of work you do will determine when you can return to work.

Follow-up appointment

Talk to your doctor or nurse about your follow-up appointment. Arrangements will be made for your follow-up appointment in the Pacemaker Clinic.

It is important to keep all Pacemaker Clinic appointments, as you will be dependent on your pacemaker for your heartbeat.