



Patient & Family Guide  
2018

# Atrial Fibrillation and Catheter Ablation



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# Atrial Fibrillation and Catheter Ablation

## What is atrial fibrillation?

- Atrial fibrillation is when the upper chambers of the heart (the atria) fibrillate (quiver). This can cause a rapid, irregular heart rhythm. Some people with atrial fibrillation feel completely well. Others feel unwell and may feel:
  - › that their heart is racing, pounding or skipping beats
  - › short of breath
  - › fatigued (tired), with low energy
  - › it's hard to do things they like to do (like sports, walking or gardening)
  - › dizzy, weak or have chest pain
  - › a need to use the bathroom more often (increased urination)
- Atrial fibrillation is not dangerous, but it can make you feel unwell and lower your quality of life.
- There is a small chance of getting a blood clot in your heart, causing a stroke or heart attack. This chance can be lowered by taking anticoagulant (blood-thinning) medicine.
- If patients have a very fast heart rate for a long time, the heart muscle may become weak.

## What causes atrial fibrillation?

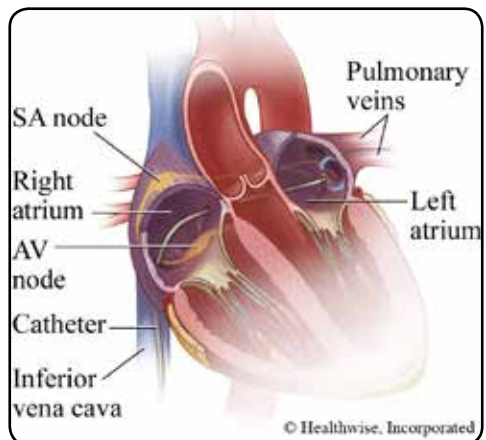
- The cause of atrial fibrillation is often unknown.
- Certain factors can make you more likely to develop it. Atrial fibrillation often affects people who already have coronary heart disease or who have had a heart attack.
- Other possible causes include:
  - › high blood pressure
  - › valvular heart disease (affecting one or more heart valves)
  - › heart failure or enlarged heart (cardiomyopathy)
  - › congenital (present at birth) heart disease
  - › overactive thyroid gland
  - › acute (sudden) or chronic (ongoing) lung disease
  - › inflammation (swelling) of the heart muscle (myocarditis) or lining of the heart (pericarditis)
  - › obstructive sleep apnea (when a person stops breathing while sleeping due to a blocked airway)
  - › drinking too much alcohol (acute or chronic)
  - › being overweight
  - › vagally mediated (habitual aerobic training)
  - › genetic factors (passed down from one generation to the next)

## How is atrial fibrillation treated?

- **If you feel OK, you will need:**
  - › Beta-blockers or calcium channel blockers (heart rate control medicines) to slow your heart rate.
  - › A mild blood thinner (like aspirin) or a stronger anticoagulant (like warfarin, dabigatran (Pradaxa®), rivaroxaban (Xarelto®), apixaban (Eliquis®) or edoxaban (Lixiana®)) to avoid blood clots and lower the chance of stroke.
- **If you feel unwell, you may need:**
  - › Special medicines called anti-arrhythmics. These drugs are different than heart rate control medicines because they try to help keep your heart in a normal rhythm. These medicines can work well, but may have side effects. The side effects will depend on which drug is used. Your doctor can tell you more about this.
  - › Catheter ablation. This treatment may either prevent atrial fibrillation from coming back or lower how often atrial fibrillation episodes and symptoms happen, and how bad they are.

## What is catheter ablation?

- Catheter ablation is a non-surgical procedure that may be used when medication is not controlling your heart rhythm or symptoms. The goal of catheter ablation is to decrease or prevent atrial fibrillation episodes and symptoms to improve your quality of life.
- Catheter ablation is done in an electrophysiology lab in the hospital. It is done by an electrophysiologist and a team of highly skilled nurses and technicians.
- The procedure involves putting catheters (thin flexible wires) into the veins in both of your groins.
- The catheters are threaded up into your heart where they will detect electrical signals. The areas in your heart that are causing abnormal electrical signals will be identified and destroyed by sending short bursts of energy through the wires.
- Abnormal electrical signals are often found in the pulmonary veins in the left upper chamber of the heart (left atrium). These veins carry oxygen from the lungs and drain into the left atrium.



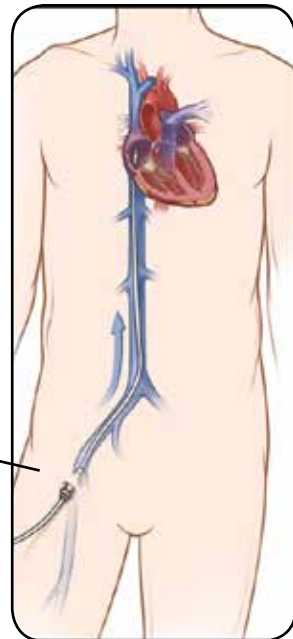
- Catheter ablation is not a cure for atrial fibrillation, but it has been found to stop it in some people. The success rate of the procedure is between 50 and 80%. However, some patients may need 2 or 3 treatments for the procedure to be successful.

## **How is catheter ablation done?**

- Catheter ablation can be done using either heat (radio frequency ablation) or freezing (cryoablation). Your doctor will decide which type of ablation is best for you.
- The procedure usually takes 3 to 4 hours, but may take up to 6 hours.
- A CT scan of your heart may be done the day before your procedure.
- Some patients may need a special ultrasound picture of the heart (transesophageal echocardiogram). This is done by putting a probe down your esophagus (swallowing tube). This test is done to make sure that there are no blood clots inside your heart before your procedure.
- You will be asked to lie on a hospital bed. You must lie still during the procedure.
- You will likely have conscious sedation. This means that you may be awake for all or parts of the procedure. You will get medicine(s) that will make you feel drowsy and relaxed, and keep you comfortable.

- The catheters will be placed into the veins in your groins. They will then be threaded up into your heart.
- The catheters will be poked through the wall that separates the right and left sides of your heart (the septum) and into the left atrium.
- A small amount of energy will be sent down the catheter to destroy the spot causing the atrial fibrillation using either “burning” or “freezing”.
- After the procedure, all of the tubes will be removed.
- You must lie flat for 3-4 hours and stay on bed rest for up to 6 hours. You need to keep your legs straight so that the spots where the catheters were inserted do not bleed.

Catheter inserted into vein in groin



## What are the risks?

- All procedures involving the heart have a small risk of a serious complication.
- Possible complications include:
  - › bleeding from or damage to a blood vessel in the groin(s) (1-2 in 100)
  - › puncture (poking a hole in) or bleeding in the heart (1 in 100)
  - › a blood clot could form and cause a stroke (1 in 100)
  - › irritation of the lining of the heart that causes pain (1-2 in 100)
  - › damage to the veins or nerves in or close to the lung(s) (1 in 200)
  - › injury to the nerve that controls the breathing muscles (1 in 500)
  - › injury to the nerve that controls stomach motility (movement of food through the digestive tract) (1 in 500-1000)
  - › very rarely, a link is made between the swallowing tube (esophagus) and the heart (1 in 5000), which could cause death



## **What happens after the catheter ablation?**

- You will stay overnight in the hospital so we can check you and watch for any side effects.
- You will likely go home the next day.
- You will need to take blood thinners or anticoagulants for at least 3 months after the ablation procedure. Some people may need to stay on anticoagulant medication for the rest of their lives.
- In most cases, your discharge medications will stay the same as before your ablation procedure. You will get a prescription for medication to control stomach acid for 4-6 weeks after your discharge, if you are not already taking one.
- You may feel chest discomfort, soreness, or pain for the first few days to weeks after the procedure.
- You may notice an increase in your atrial fibrillation for a few weeks. It is normal to have episodes of atrial fibrillation in the first 3 months after the procedure. This does not mean the procedure didn't work. The heart needs time to heal after the ablation procedure.
- You will visit the nurse practitioner or specialist at 6 weeks, 3 months, 6 months and 1 year after the procedure. The nurse practitioner or specialist will talk with you about using blood thinners and medicines at these followup visits.

## What can I do when I get home?

- Avoid heavy lifting (more than 5-10 pounds) for 7 days.
- Avoid strenuous (hard) exercise for 7 days. If you would like to exercise, try walking.
- **Do not drive a vehicle for 48 hours (2 days) after the procedure.** This is because of sedation and the increased risk of bleeding from the groin(s).

## To prevent groin bleeding:

- For the first 2 days, use your hand to put gentle pressure on the puncture sites in your groins when you laugh, cough, sneeze or move your bowels (poop).
- You may shower the day after your procedure, but do not leave wet bandages on your groins. If there is no drainage from your groins, the bandages can be removed and your groins left open to the air.
- Do not take a tub bath or swim in a pool for at least 2-3 days after your procedure.

## What if I have atrial fibrillation after my ablation procedure?

- It can take up to 3 months for scar tissue to heal from the ablation procedure.
- You may still have atrial fibrillation for the first 6-12 weeks. You can treat this the same as you did before your procedure. The goal during this time is that you not stay in atrial fibrillation for long periods of time.

### **Go to the nearest Emergency Department if you have:**

- › chest pain that doesn't go away
- › increased shortness of breath where you feel like you are struggling to catch your breath
- › lightheadedness related to atrial fibrillation where you are very dizzy or worried that you might pass out

- If you are often having symptomatic episodes of atrial fibrillation shortly after your ablation procedure, your health care provider may consider medication dose titration (adjusting the dose of your medication to get the best effect with the least side effects) or changing your medication.

- About 1 in 50 patients may have a different rhythm problem called “atrial flutter”. This can be reversed with either cardioversion (electrical shock to the heart) or medicine. A repeat ablation is sometimes needed.

## **What can I expect after my catheter ablation?**

- You may have mild chest heaviness or discomfort. This should go away over a few days to a week. Chest discomfort is often worse when lying down or taking a deep breath. This is related to inflammation from the procedure. Talk to your health care provider about short term anti-inflammatory medications to help with the discomfort, if needed.
- Groin bruising is very common and will go away within a couple of days to a week.
- Small pea-sized lumps may form at the groin insertion sites. This is related to scar tissue from moving the catheters. It is nothing to worry about. This will go away after several weeks.

**What are your questions?  
Please ask. We are here to help you.**



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The information in this pamphlet is to be updated every 3 years or as needed.