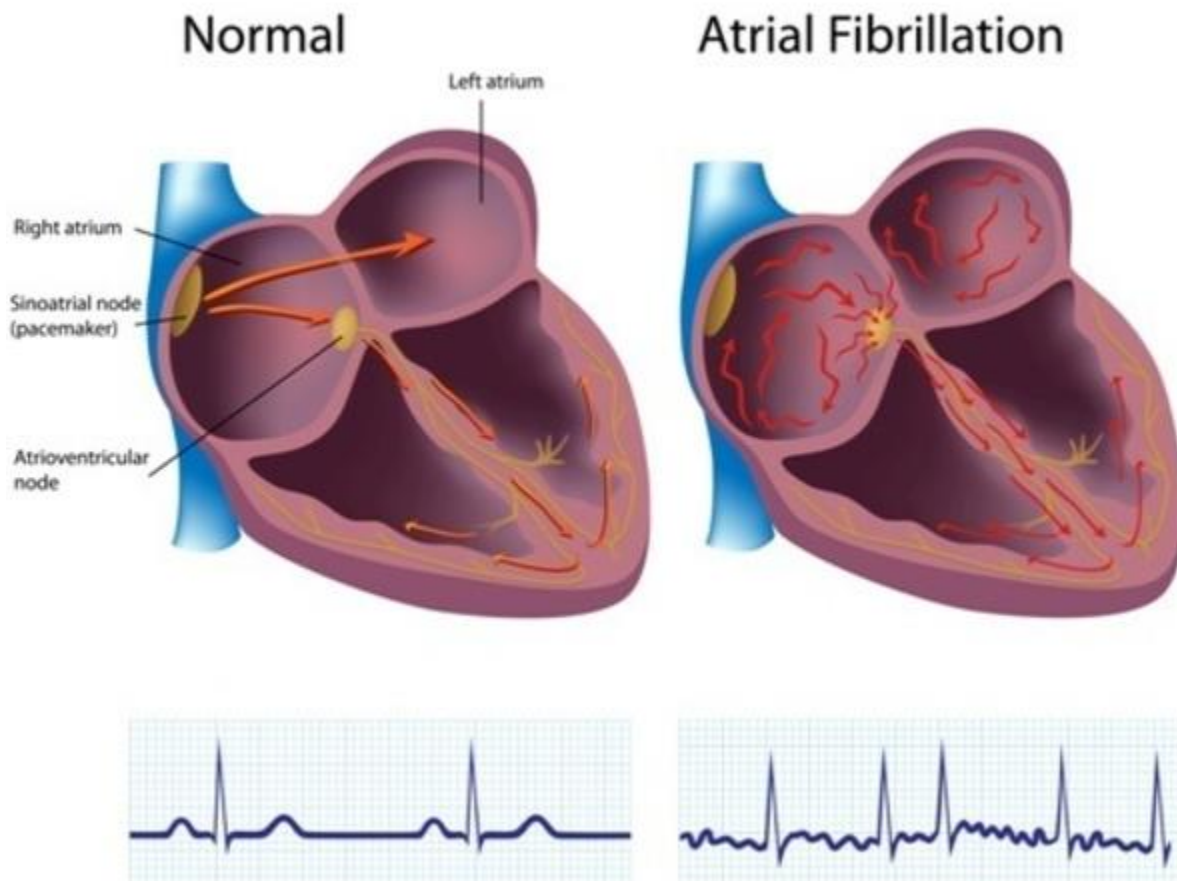


Atrial Fibrillation Ablation Decision Guide

Should I have Catheter Ablation? This guide will help answer your questions.

What is Atrial Fibrillation (Afib)?

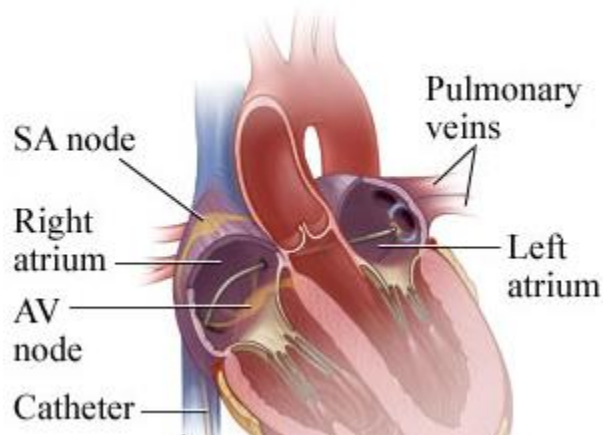
Atrial fibrillation is the most common heart rhythm problem. Atrial fibrillation is when the top chambers of your heart (atria) do not beat regularly and they quiver. This sends irregular electrical signals to the bottom chambers (ventricles) of your heart which pump blood to your lungs and body. This leads the atria and ventricles to not work as efficiently as normal. When the atria do not contract fully, pushing all the blood into the ventricles, some of the blood can begin to pool in the atria and can form clots. Blood thinners are often prescribed to prevent these clots from forming.



What is Atrial Fibrillation Catheter Ablation?

Catheter ablation is a procedure used to treat the abnormal rhythm of atrial fibrillation. It can restore your heart back to a normal rhythm, but unfortunately it does not work for everyone. Sometimes, repeat ablations are necessary to restore normal rhythm and relieve your symptoms. Repeated ablations have a higher chance of success. Catheter ablation damages the heart tissue causing the abnormal signals in your atria. Scar tissue develops after this and interrupts the abnormal signals, which helps keep you in normal rhythm.

A thin tube called a catheter is inserted in your groin. This tube is threaded up your blood vessel to the area in your heart that is sending out the abnormal signals. The doctor uses special X-ray equipment to see where the catheter is located. Radiofrequency energy (heat) or cryo (cold) is then used to destroy (ablate) the tissue that is causing the atrial fibrillation.



Information about Catheter Ablation:

- The procedure is usually 2-6 hours in length.
- You will be given general anesthesia, so you will be comfortable and sleeping.
- You may go home several hours after the procedure or you will stay overnight in the hospital.
- Most patients have to continue blood thinners even after a successful ablation to prevent a stroke. Your physician will discuss your individual risk of stroke and if you will need to continue blood thinners after the ablation.

Benefits of Catheter Ablation:

- Relieve symptoms and feel better
- Reduce use of heart rhythm medications

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Risks of Catheter Ablation (these are rare):

- Bleeding
- Infection
- Nerve injury in the chest (phrenic nerve) or problems with a pulmonary vein (stenosis)- can occur in 1 to 6 people out of 100 peopleⁱ
- Stroke-can occur in 1 out of 100 peopleⁱ
- Vein problems can occur in 1 out of 100 peopleⁱⁱ
- Accidental hole in the heart (cardiac tamponade) - 1 out of 100 peopleⁱ
- Atrio-esophageal fistula, can occur in 1 out of 1,000 peopleⁱ
- Death-can occur in 1 out of 1,000 peopleⁱ

Alternatives to Catheter Ablation:

- Do not have the procedure
- Continue to take heart rhythm medications

When is Catheter Ablation done?

The choice to have catheter ablation depends on what you want. As discussed above, ablation does have risks, but they are rare. Many people decide to have an ablation because they want to feel better afterwards and/or stop heart rhythm medications. Atrial fibrillation is not 100% curable, it can occur again, but the symptoms can be significantly reduced with ablation. For some people the benefit is worth the risk, but that risk may not be worth it to all people.

A few things you can discuss with your health care provider are^{iv}:

1. What type of atrial fibrillation do I have?
 - a. Paroxysmal-at least 2 episodes that end spontaneously within 7 days.
 - b. Persistent-continuous beyond 7 days or lasting less than 7 days, but requires medication or electrical cardioversion to stop the episode of atrial fibrillation.
 - c. Long standing persistent-present continuously for more than a year.
2. How bad or bothersome are your symptoms?
3. Do you have any structural problems with your heart?
4. Have you tried heart rhythm medications and your symptoms have not resolved or you have side effects on these medications?

Who should not have an ablation?

1. If you cannot take blood thinners during or after the procedure.
2. If you have a blood clot in your left atrium.
3. If you are not able to lie flat during the procedure.

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How successful is catheter ablation:

- Catheter ablation works better in people who have paroxysmal atrial fibrillation.
- On average, ablation has a 70-80% chance of success. That means that 70-80 people out of 100 will have success. 20-30 out of 100 cases will not.ⁱ
- Older patients with underlying heart disease have a lower success rate around 40-60%.
- For people with persistent atrial fibrillation, ablation helped 50 out of 100 people.ⁱⁱⁱ
- Repeat ablations are needed in about 20-40 patients out of 100 cases. So 60-80 people do not need a repeat.ⁱⁱⁱ
- Long standing persistent atrial fibrillation is more difficult to treat.^{ivv}

Problems that may develop after the procedure:

- Bleeding at the catheter insertion site
- Mild Pain
- Bruising at catheter insertion site

Benefit versus risk of catheter ablation:

Benefits outweigh risks:

- You have symptoms that bother you a lot
- You do not want to take heart rhythm medicine
- Heart rhythm medicines are not working
- You have side effects from heart rhythm medicine
- You cannot take heart rhythm medicine because of other health problems

Risks outweigh benefits:

- You have no symptoms or symptoms are mild
- You cannot undergo anesthesia
- You cannot take blood thinners

What matters most to you?

The decision to have an ablation is entirely up to you. Your feelings are just as important as the medical facts. Think about what matters most to you in this decision. Listed below are reasons you should have catheter ablation and reasons you should not. Thinking about these will help you in making the best decision for yourself.

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Reasons to have catheter ablation:

I am not worried about having a procedure that involves my heart

The side effects of the medicines bother me

Medicines are no longer effective for my atrial fibrillation

I am bothered by my heart rhythm symptoms

I am not happy with my quality of life, either because of my symptoms or side effects of the medicine

The risk of the ablation does not bother me as much as the risks of continuing medication

Your reasons:

- 1. _____
- 2. _____
- 3. _____

Reasons not to have catheter ablation:

I am very worried about having a procedure that involves my heart

The side effects of the medicines do not bother me that much

My symptoms don't bother me

My quality of life is pretty good

I prefer the risks of taking my medicines over the risks of having catheter ablation.

Your reasons:

- 1. _____
- 2. _____
- 3. _____

ⁱ Tedrow UB, et al. (2011) Electrophysiology and catheter-ablative techniques. In V. Fuster et al., eds., Hurst's The Heart, 13thed., vol 1, pp. 1058-1070. New York: McGraw-Hill.

ⁱⁱ Cappato R, et al. (2010). Updated worldwide survey on the methods, efficacy and safety of catheter ablation for human atrial fibrillation. Circulation: Arrhythmia and Electrophysiology, 3(1): 32-38.

ⁱⁱⁱ Calkins, H et al. (2012). 2012 HRS/EHRA/ECAS expert consensus statement on catheter and surgical ablation of atrial fibrillation: Recommendations for patient selection, procedural techniques, patient management and follow-up, definitions, endpoints, and research trial design. A report of the Heart Rhythm Society (HRS) Task Force on Catheter and Surgical Ablation of Atrial Fibrillation. Heart Rhythm, 9(4): 632-696.e21.

^{iv} January C, et al. (2014) 2014 AHA/ACC/HRS Guideline for the Management of Patients with Atrial Fibrillation. A report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines and the Heart Rhythm Society. Journal of the American College of Cardiology, 64(21).

^v January C, et al. (2019) 2019 AHA/ACC/HRS Focused Update of the 2014 AHA/ACC/HRS Guideline for the Management of Patients with Atrial Fibrillation. A report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines and the Heart Rhythm Society. American College of Cardiology 2019: Jan 28

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