

A Guide to Your Left Atrial Catheter Ablation

Please bring this book with you on the day of your procedure





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Patient and Visitor Guide

To prepare for your visit, please visit <u>wexnermedical.osu.edu/patient-and-visitor-guide</u> and learn about available resources, including:

- For Patients tab: Billing and Financial Assistance
- For Visitors tab: Locations and Parking (such as <u>driving directions</u> to Richard M. Ross Heart Hospital) and Visitor Policies (such as <u>Hotel Accommodations</u> information sheet).

For a digital copy of this book, please visit go.osu.edu/pted4366.

Talk to your doctor or health care team if you have any questions about your care.

For more health information, go to **wexnermedical.osu.edu/patiented** or contact the Library for Health Information at 614-293-3707 or health-info@osu.edu.

Welcome

Your doctor is recommending that you have catheter ablation done to treat your fast and irregular heartbeat, called atrial fibrillation (also known as A-fib, AF). Treatment for A-fib is done to control heart rate, prevent stroke, and restore and maintain normal heart rhythm.

We hope that this book will help you better understand why catheter ablation can help return your heartbeat to a more normal pattern.

Please review this book to learn what you need to do to prepare for your procedure. Call our office if you have questions or if there is anything that you do not understand.



Electrophysiology (EP) procedure room at Richard M. Ross Heart Hospital

Contact information

Ross Heart Hospital

452 West 10th Ave, Suite 1052 Columbus, OH 43210

Hours of operation

Monday - Friday 8:00 am to 4:30 pm Closed weekends and major holidays

Before the procedure

Call 614-293-3201 to:

- · Ask questions.
- Check arrival time for tests.
- Cancel or reschedule tests or ablation if more than 24 hours before the procedure.

Call 614-293-3056 to:

- Check the arrival time for ablation procedure.
- Cancel or reschedule within
 24 hours of the procedure.

After the procedure

To report problems you are having after the procedure, call the number marked:

- **□** 614-293-5122
- **□** 614-293-4299

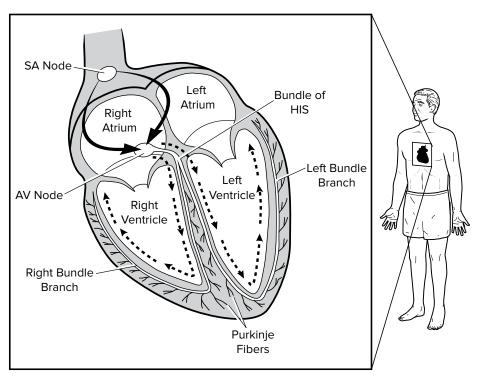
About Atrial Fibrillation and Catheter Ablation

Normal heartbeat pattern

For most people, the heart pumps or contracts and relaxes to a regular beat.

What allows your heart to beat normally is an electric pulse that starts at the **SA** (sinoatrial) node.

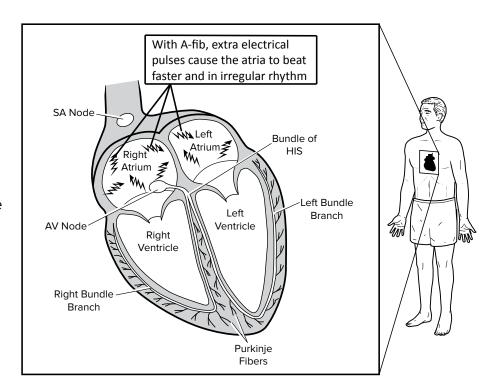
The SA node is above the upper chambers of the heart, called the **right atrium and left atrium** or atria. It is your heart's **natural pacemaker**. It sends electric signals to **AV** (atrioventricular) node, which carries the signal through its right and left branch to the rest of your heart to contract and pump blood.



Atrial fibrillation

With A-fib, the SA node may not start the electric pulse. Instead, there are several signals coming from other parts of the atria. The heart beats faster and in an irregular rhythm, causing poor blood flow.

The poor blood flow can cause blood clots to form in your heart. If a clot breaks loose, it could cause a stroke or damage other organs in your body.



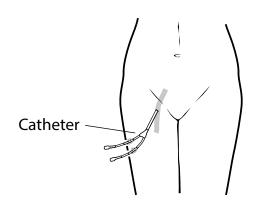
Electrophysiology Study (EPS or EP Study)

An electrophysiology study is a test that observes and measures the electrical impulses of the heart. An EP study uses small amounts of energy delivered to the heart to cause the abnormal heart rhythms to happen. This allows the doctor to find the place in your heart where they are starting from and identifies where treatment needs to be done to stop these signals from starting an abnormal heart rhythm..

Catheter ablation

To treat your A-fib, you are scheduled to have a procedure called **catheter ablation**, **cardiac ablation or radiofrequency ablation**. This procedure is done to get rid of (ablate) the abnormal electrical signals so that you will have a more normal rhythm.

The doctor will use catheters, which are like thin flexible tubes. These are put into a vein in your upper leg or groin and guided into your heart as the doctor watches a monitor that shows x-ray pictures of your heart and blood vessels.



The doctor will first use a catheter to find the abnormal signals to locate the right spots to treat. This is called an electrophysiology study or EPS.

Using the same site, another catheter will be used to stop the abnormal signals. The catheter tip sends radiofrequency or cryoenergy to scar spots inside your heart where the abnormal electrical signals start. The scarring will break the signal path to stop the abnormal electrical signals.

Wires may also be put in through the catheter site to cause electrical signals in your heart. This is done to check that the right spot is being treated, or that the scarring was enough to stop the path of the electrical signals.

Preparing for Your Catheter Ablation

A	ppointment details					
•	The date of your catheter ablation procedure is					
•	Arrive at This arrival time is when you need to be at the hospital, so we					
	can prepare you for your procedure. It is NOT the procedure start time.					
•	Please allow for a full day for the procedure.					
Эn	n the day of your procedure, please:					
•	Report to the Ross Heart Hospital, located at 452 West 10th Avenue, Columbus, Ohio 43210					
•	Register in the main lobby.					
Ga	let parking is available in front of the hospital, or you may park in the SafeAuto Hospitals arage, which is attached to the hospital. The garage's address is 1585 Westpark Street, blumbus, OH 43210.					
Te	ests before the procedure					
Yo	u may have the following tests marked below.					
	You are having these tests the same day as your procedure.					
	You are having these tests on a different day than your procedure. Please follow the instructions given to you to prepare for your tests.					
•	Transesophageal Echocardiography (TEE) Date: Arrive at:					
	A TEE checks for blood clots in your heart. It also shows the doctor how well the valves and chambers of the heart are working. The test is done with a flexible tube put into your mouth and down into your throat and esophagus. It creates pictures of your heart using sound waves.					
•	Computed Tomography (CT) Scan Date: Arrive at:					
	This is an x-ray that uses a special scanner and computer to show cross-sectional pictures of your heart and blood vessels.					
	Pulmonary Vein CT Scan Date: Arrive at:					
	The pulmonary vein CT scan is used to see the pulmonary veins. These are the large blood vessels that carry oxygen-rich blood from the lungs back to the left atrium of the heart.					
	Cardiac Magnetic Resonance Imaging (MRI) Date: Arrive at:					
	This test can show images or pictures of the heart and blood vessels from any angle using powerful magnets and radio frequency waves. This test is safe and painless.					
•	Lab Work Date: Arrive at:					
	You will have blood drawn before your procedure. This will either be done the same day as your procedure or at an appointment before.					

Getting ready for your catheter ablation procedure

- Call Pre-registration at least 7 days before your procedure at 614-293-8200 to make sure your hospital visit is authorized by your insurance (if you have not done so already). • If you take any of these medicines, stop taking them for _____ days before your procedure. Disopyramide, also called Norpace Procainamide, also called Procan Dofetilide, also called Tikosyn Propafenone, also called Rythmol
 - Flecaininde, also called Tambacor Quinidine, also called Quiniglute Mexiletine, also called Mexitil Sotalol, also called Betapace
- If you take an anticoagulation medicine, also called a blood thinner, do not stop this medicine unless directed by the electrophysiology (EP) team. Some procedures may not require you to hold this medicine. If you are told that a hold is needed, please follow these instructions:
 - Stop your warfarin (Coumadin) _____ days before your procedure. Take one aspirin (325 mg size) a day, unless you are allergic, starting the day you stop the warfarin (Coumadin). If you have ANY questions about this, please contact your EP team.
 - Stop your dabigatran (Pradaxa) _____ doses before your procedure. If you have ANY questions about this, please contact your EP team.
 - Stop taking your rivaroxaban (Xarelto) _____ doses before your procedure. If you have ANY questions about this, please contact your EP team.
 - Stop your apixiaban (Eliquis) _____doses before your procedure.
- Other medicine instructions: _____
- Do not eat or drink anything after midnight the evening before your procedure. You may take your scheduled medicines with small sips of water the morning of your procedure.
- Do not smoke or use tobacco products for 24 hours before your procedure.
- If you have diabetes, your diabetes medicines or insulin may need to be stopped or changed before your procedure. You will be given specific instructions on what to do. There are some general guidelines in this book.
- Please bring your medicines in their bottles to the hospital with you.
- If you use a sleep apnea machine, please bring the machine and tubings with you. It will likely be used during your procedure.
- Please come prepared to spend the night. Most patients will stay overnight. If you are sent home the day of your procedure, you will need to have an adult take you home. You will not be allowed to drive the day of your procedure.
- If you have an allergy to shellfish, iodine or contrast dye, tell your doctor before the test. If you have this allergy:
 - You will need to take three doses of Prednisone 50 mg. You will need a prescription from your doctor. You will need to take a dose at 13 hours before your test, 7 hours before your test and 1 hour before your test.
 - You will also need to take Benadryl 50 mg 1 hour before your test. This can be purchased over the counter.
- Take all other medicines as instructed by your doctor.

Type 1 Diabetes: Medicines before Tests or Surgery

If you are not sure how to adjust your diabetes medicines, talk to your doctor or nurse before your test or surgery date. Follow your doctor's directions if they are different than these guidelines.

Diabetes medicines may need to be stopped or changed before a test or surgery. This is important for your health. There is less of a chance for infection or other problems if your blood sugar is in the normal range before a test or surgery.

- If you are on a clear liquid diet the day before your test or surgery, call your doctor to check if you need to make other changes to your medicine dose.
- Check your blood sugar the morning of your test or surgery. If it is above 250 or less than 70, call your doctor for more instructions. High or low blood sugars may result in a delay or cancellation of your test or surgery that day.
- **Tell your nurse that you have diabetes** when you arrive at the test area or at pre-operative holding area.



Your insulin

These are general guidelines for how to take insulin before tests or surgery. Many patients with type 1 diabetes need a small reduction in basal insulin before tests or surgery. Check with your doctor to see how much insulin you need and if you need to follow different guidelines.

- ☐ If you take Humalog/Admelog (lispro), Novolog (aspart), Apidra (glulisine), Fiasp (aspart) or Regular insulin, do not take the dose the morning of your test or surgery.
 - You can start your usual dose after your test or surgery when you are able to eat and drink.
 - Plan to check your blood sugar at least 4 times each day for the next 1 to 2 days after your test or surgery.
- ☐ If you take Levemir (detemir), Lantus (glargine), Basaglar (glargine), Tresiba (degludec), or Toujeo (glargine) insulin, reduce your dose either the evening before or the morning of your test or surgery to 80%.

If you multiply your usual dose by 0.8, that gives you the reduced dose. For example, if your usual dose is 32 units, $32 \times 0.8 = 25.6$. Your reduced dose would be about 26 units. A reduced dose chart is on the next page for your reference.

- If you are not sure, ask your doctor how much insulin you should take. Take
 _____ units of _____ on the night before or the morning of your test or surgery.
- If you are able to eat and drink after your test or surgery, take your usual evening dose.
- Plan to check your blood sugar at least 4 times each day for 1 to 2 days after your test or surgery.

If you wear an insulin pump

- ☐ And your test or surgery is <u>less than 3 hours</u>, you and your doctor may decide to keep the pump on.
 - Place the catheter in a location away from the area where the test or surgery will occur.
 - Consider using a temporary basal profile based on 0.8 of your usual basal. Reduce the basal rates down by multiplying the set basal rates by 0.8, starting with the 12:00 midnight basal rate through the test or surgery and recovery. **Discuss this with your doctor.**
 - Return to your usual basal rates after the test or surgery when you are able to eat and drink.
 - Plan to check your blood sugars more often for the next 1 to 2 days after your test or surgery.

And your test or surgery	is longer than 3 hours or your	doctor takes yo	u off the insulin
pump, take	units of	on the morning	g of your test or
surgery.			

Type 2 Diabetes: Medicines before Tests or Surgery

If you are not sure how to adjust your diabetes medicines, talk to your doctor or nurse before your test or surgery date. Follow your doctor's directions if they are different than these guidelines.

Diabetes medicines may need to be stopped or changed before a test or surgery. This is important for your health. There is less of a chance for infection or other problems if your blood sugar is in the normal range before a test or surgery.

- If you are on a clear liquid diet the day before your test or surgery, call your doctor to check if you need to make other changes to your medicine dose.
- Check your blood sugar the morning of your test or surgery. If it is above 250 or less than 70, call your doctor for more instructions. High or low blood sugars may result in a delay or cancellation of your test or surgery that day.
- **Tell your nurse that you have diabetes** when you arrive at the test area or at pre-operative holding area.

Your oral diabetes medicines

These are general guidelines for how to take insulin before tests or surgery. Check with your doctor to see how much insulin you need and if you need to follow different guidelines.

- ☐ If you are having a test or surgery that includes IV contrast dye and you take Glucophage, also called metformin, or any other medicine that has metformin in it, such as Metaglip, Glucovance, Avandamet or ACTO plus Met:
 - Do not take metformin the day of your test or surgery.
 You should take your last dose on ______(date).
 - Do not take this medicine for 2 days after your test or surgery. Restart this medicine on the third day after your test or surgery.
 - If you are not sure if you will have a test with IV contrast, call your doctor to find out.
- ☐ If you are having a same day test or surgery and you take other diabetes pills:
 - Do not take your diabetes pills in the morning before your test or surgery.
 - If your test or surgery is done before noon and you are able to eat and drink, take your morning diabetes medicine after your test or surgery.
 - If your test or surgery is done after noon and you are able to eat and drink, take your diabetes medicine at the next scheduled time. You will skip your morning dose.
- ☐ Check your blood sugar at least 4 times each day for the next 1 to 2 days after your test or surgery.



If you take insulin

- ☐ If you take Humalog (lispro), Novolog (aspart), Apidra (glulisine), Fiasp (aspart) or Regular insulin: Do not take the dose the morning of your test or surgery. • You can start your usual dose after your test or surgery when you are able to eat and drink.
 - Plan to check your blood sugar at least 4 times each day for the next 1 to 2 days after your test or surgery.
- ☐ If you take Levemir (detemir), Glargine or Lantus (glargine), Basaglar (glargine), Tresiba (degludec), or Toujeo (glargine) insulin:
 - Cut your dose in half the evening before or the morning of your test or surgery. For example, if your usual dose is 32 units, 32/2 = 16. Your reduced dose would be 16 units.
 - If you are not sure, ask your doctor how much insulin you should take. Take units of _____ on the night before or the morning of your test or surgery.
 - If you are able to eat and drink after your test or surgery, take your usual evening dose.
 - Plan to check your blood sugars at least 4 times each day for 1 to 2 days after your test or surgery.
- ☐ If you take NPH, 70/30, 75/25, or 50/50 insulin:
 - Reduce your evening dose the day before your test or surgery to 50%. If you are not sure, ask your doctor how much insulin you should take.
 - Also, reduce your morning dose by ½ or 50% of your usual dose the day of your test or surgery. For example, if your usual morning dose is 30 units, you would take only 15 units. Take _____ units of _____ the morning of your test or surgery.
 - If you are able to eat and drink after your test or surgery, resume your usual evening dose.
 - Plan to check your blood sugars at least 4 times each day for 1 to 2 days after your test or surgery.

What to Expect with this Procedure

Before and during the procedure

- You will be brought to the procedure room and greeted by your electrical heart team.
- Your blood pressure will be taken every five minutes.
- Fluids will be started through your IV.
- Your wrists will be lightly restrained, so you do not touch any sterile areas.
- Your groin will be shaved, if needed, and cleaned with a sterile soap called chlorhexadine. After the soap has dried, a sterile drape will be placed from your neck to your feet.
- General anesthesia will be used for your procedure, which your doctor will have talked with you about at your office visit. You will be asked to sign a consent form before this is done. Some people feel nauseous after having general anesthesia.

After the procedure

- You will return to the post-operative area on your bed with IVs in your leg. In some cases, these are removed as soon as you arrive. If you have had a blood thinner during your procedure, your blood will be checked often to make sure it is not too thin, and then the IVs will be removed.
- When you first wake up, you may feel cold and you may shiver. This is normal if you have had general anesthesia.
- You will need to lie flat for 2 to 3 hours after the IVs have been removed. You will need to keep your legs straight and your head down during this time.
- After the IVs are removed, the staff will apply a gauze dressing and a bandage.
- If you need to cough, sneeze, or laugh, hold gentle pressure to the dressing. If you feel something warm or wet running down your leg, hold pressure to the dressing site and call your nurse immediately.
- If you bleed after the IVs have been removed, your bed rest may be longer, so it is very important that you listen to all instructions and lie flat in the bed.
- You will be able to eat and drink after your procedure. Some people have nausea after general anesthesia.
- If you have nausea or vomiting, drink clear liquids and follow the BRAT diet for 8 to 12 hours.
 - Clear liquids include water, lemon lime soda and fruit juices that have no pulp like apple, grape and cranberry.
 - The BRAT diet includes bananas, rice, applesauce and dry toast. These bland foods can help you ease back into your normal diet. Do not add dairy products, sugary or fatty foods right away until you are sure the nausea or vomiting has stopped.
- The doctor will speak with you and your family after the procedure and answer your questions.

Your Care after Returning Home

You will need someone to stay with your for at least the first 24 hours after your procedure for your safety.

Care of your site

- The dressing covering your leg site can be removed the morning after your procedure.
- Keep the area clean, dry and open to air.
 Do not put a bandage, lotion or powder on the site until it is fully healed.
- You may shower the day after your procedure. Gently wash around the site.
 Do not let the stream of water directly hit the site. Clean the site gently and pat it dry with a clean towel.
- Do not take a tub bath, swim, use a hot tub, or immerse the site in water for 1 week or until the leg site is fully healed.
- Your upper leg or groin site may be tender and have some bruising. This is normal. If the site feels hard, or there is any bleeding or swelling at the site, call right away the number marked:

614-293-5122614-293-4299

Activity limits

- Do NOT drive for the first 24 hours after your procedure.
- Ask your doctor what you should expect about your heartbeat after the procedure.
 Sometimes the irregular rhythm goes away right after the procedure. Other times, it may take longer to go away.
- Do not lift, push or pull more than 10 pounds for the first week after your procedure. A gallon of milk weighs about 8 pounds.

- Reduce stair climbing, bending, squatting, stooping and excessive walking for the first week after your procedure.
- Ask your doctor when you can expect to return to work.

Managing pain without medicine

Many patients find they are able to manage pain without using medicine. Options include:

- Activity: Start moving as soon as possible after surgery if your doctor says it is okay. Moving helps your breathing and digestion, and helps you heal faster. Moving and being active can help lessen pain over time.
- Cold and Heat: Both cold and heat can help lessen some types of pain. Some pain improves best using cold while other types of pain improve with moist heat. Talk to your nurse about which is best for your type of pain.
- Deep Breathing: Taking slow deep breaths can help you relax and lessen pain.
- Distraction: This method teaches you to focus your attention on something other than pain. Playing cards or games, talking and visiting with family may relax you and keep you from thinking about the pain. Watching TV or reading may also be helpful.

- Music: Whether you listen to music, sing or hum, or play an instrument, music can help you relax and help you breathe more deeply and slowly. It can also increase your energy and help change your mood.
- Relaxation Techniques: Stress and anxiety can make pain worse and may slow healing. Since it is hard to avoid stress, it can help to learn how to control stress. Below are different ways to help you relax:
 - Use extra pillows and blankets to stay in a comfortable position.
 - Make sure the room is the right temperature for you.
 - A massage of your back, hands or feet may help lessen your pain.
 - Try placing a cool cloth on your hands or face.
 - Close your eyes and imagine yourself in a place you find relaxing. Think about sounds or sights that you enjoy.

Talking about your pain

Tell your health care team as much as you can about your pain. Share with them:

- Location: Where does it hurt?
- Intensity: How strong does the pain feel?
- Duration: How long do you feel the pain? How often does the pain occur?
- Causes: What makes the pain worse?
- Relief: What helps the pain?
- What the pain is like: Is it burning?
 Sharp? Dull? Stabbing? Spasms? Aching?

Talk to your doctor if you are having more pain that you can tolerate.

Medicines

- You may take acetaminophen (brand name Tylenol or store brand) to help with pain around the leg site. Follow the directions for the amount and time between doses on the package. Stronger pain medicine is not usually prescribed for pain after this procedure.
- You may be given a prescription for esomeprazole (brand name Nexium), for the next 30 days. This is to protect your esophagus, the tube through which food travels to your stomach.
- Your health care provider will review all of your medicines with you on your discharge instructions before you leave the hospital.

Follow up visit

You will be scheduled for a follow up visit with your electrophysiology (EP) doctor. Please bring a list of all our medicines to this visit.

If you have not been contacted within 6 weeks to set up your 3-month visit, please call us at 614-293-7677, option 1.

Call your doctor right away if you have

- Redness, swelling, bleeding or drainage from the leg site
- Temperature of 100.4 or higher, or as directed
- Nausea or vomiting
- Afib episode lasting longer that 24 hours

Call 911 if you have

- · Chest pain or shortness of breath
- Sudden coldness
- Sudden pain or numbness in the leg with the site

Action Plan after AFib Ablation

Know When to Call for Help

What to expect

For the next 2 to 5 days:

- You likely will have a small bruise at the groin site where the catheter was placed.
- You may have a small amount of swelling at the site, but it should stay the same size, or get less over the next few days.
- You may feel a mild burning sensation in your chest, especially when you take in a deep breath.

Call 911 or go to the nearest Emergency Room if you have:

- Problems breathing or more or worse chest pain, with or without rapid heart rate
- Severe sudden pain at the groin site, or bleeding that does not stop after applying pressure for 10 minutes while lying flat and still
- Any signs of stroke such as vision changes, trouble speaking, weakness in arm or leg or mouth droop
- Fainting or near fainting spells
- Confusion or not able to think clearly

Call your doctor at 614-293-4299 if you have:

- Breathing or chest pain seems worse
- Groin site bruise that swells or gets more firm or the site is more painful
- Back pain with dizziness
- Bladder pressure or you are not able to urinate (pee)
- · A feeling that something is just not right
- Questions or concerns about your care or medicines

Continue what you are doing if you have:

- Groin site bruise without changes to size and feel and pain is managed.
- Chest burning that becomes less
- Mild back pain that lessens as days pass



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