

Having Heart Surgery? Have Afib?

ACT

against Afib

What is Afib?

Atrial fibrillation is an abnormal and irregular heartbeat, or heart rhythm. It occurs in the heart's upper chambers, the atria. Atrial fibrillation is caused by erratic electrical signals in the heart. You might also hear atrial fibrillation called AF, or Afib.

Symptoms of Afib:¹

- Shortness of breath
- Fatigue
- Weakness
- Feeling lightheaded
- Chest pain
- Lowered blood pressure
- Heart palpitations (a feeling that the heart is racing)

Is Afib Always Detected Before Heart Surgery?

No. Not always. Before you have heart surgery, it's very important to mention to your surgeon if you have Afib, or symptoms of Afib.

Ask your surgeon about ablation to treat your Afib.

Afib Can Negatively Affect How a Person Feels in Other Ways, Too.



Medications: People with Afib often need to take medications to slow the heart rate and/or control the heart rhythm. Blood thinners are often used to prevent clots, and thus prevent stroke. These medications may have the following side effects:^{2,3}

- Excessive bleeding
- Dizziness
- Blurred vision
- Confusion
- Weakness
- Bleeding in the stomach or intestines
- Bleeding in the brain
- Seizures
- Fatigue
- Reddish-colored skin
- Swelling in the abdomen, ankles, or feet
- Nausea or vomiting
- Diarrhea
- Blood in stool or urine
- Dry mouth, eyes, and skin



Quality of Life: A person's quality of life can decline due to:⁴

- Symptoms of Afib
- Side effects of medication
- Stress over medications
- Anxiety
- Depression
- Frequent clinic and doctor visits⁵



Decreased Activity: The symptoms of Afib can cause a person to become less physically active. This may also lead to fewer social activities with friends and family.⁴

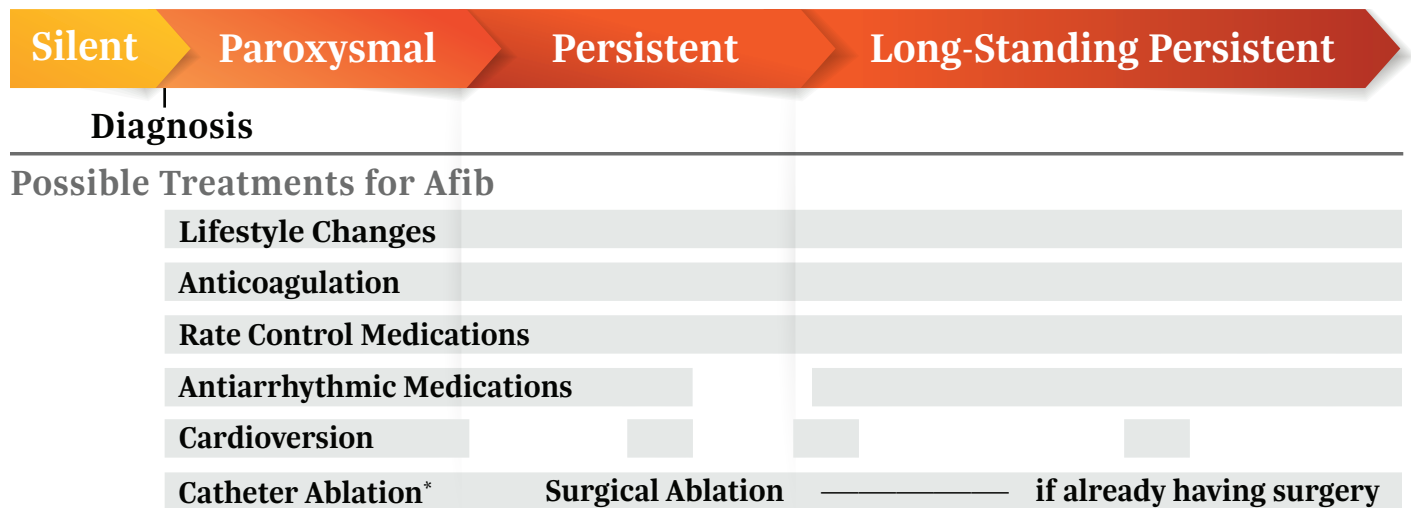
Why is Surgical Ablation of Your Afib So Important?

If you have Afib and are going to have surgery, your two heart issues can be corrected during one surgery.

1. Medical societies recommend it.⁶⁻¹⁰
2. It can help stop the Afib and reduce burden on the heart, yet only about 20–30% of people who have Afib before their surgery get surgical ablation.¹¹⁻¹³
3. Surgical ablation has the highest chance to restore a normal heart rhythm. **Research has shown it can help people with Afib to live longer.**^{11,14-15}

Stages of Afib and Common Treatments

Types of Afib



Source: Developed with the special contribution of the European Heart Rhythm Association (EHRA), Endorsed by the European Association for Cardio-Thoracic Surgery (EACTS), Authors/Task Force Members, Camm, A.J., et al. (2010). Guidelines for the management of atrial fibrillation: the Task Force for the Management of Atrial Fibrillation of the European Society of Cardiology (ESC). European Heart Journal, 31(19):2369-429.

*Some catheters may have received an early persistent indication, defined as Afib less than 6 months, for use during catheter ablation.

Is Ablation Right for Me?

Have Afib? Having Heart Surgery?

Ask Your Surgeon if Surgical Ablation is Right For You.

Ablation for Afib May Help:*

- You live longer and feel better
- You stay out of the hospital (readmissions lower)
- Your heart pumps more strongly (EF improves)
- You walk faster and feel better
- You get off coumadin and bleed less

*Source: Marrouche, N.F., Brachmann, J., & CASTLE-AF Steering Committee. (2009). Catheter Ablation Versus Standard Conventional Treatment in Patients With Left Ventricular Dysfunction and Atrial Fibrillation (CASTLE-AF) – Study Design. *Pacing Clin Electrophysiol*, 32(8):987-94, DOI: 10.1111/j.1540-8159.2009.02428.x.

If you have persistent Afib, or long-standing persistent Afib, surgical ablation during heart surgery is more effective at making sure the Afib doesn't recur.^{11,14-15}

Learn More at ACTagainstAfib.com.

References:

- ¹ Mayo Clinic. (2019, June 20). Atrial fibrillation. Accessed June 2020. Retrieved from <https://www.mayoclinic.org/diseases-conditions/atrial-fibrillation/symptoms-causes/syc-20350624>.
- ² WebMD. (2020, April 17). Medications That Treat Atrial Fibrillation. Accessed June 2020. Retrieved from <https://www.webmd.com/heart-disease/atrial-fibrillation/what-medicines-treat-afib#1>.
- ³ Davis, C.P. (2019, September 3). Atrial Fibrillation (AFib) Treatment Drugs. MedicineNet. Accessed June 2020. Retrieved from https://www.medicinenet.com/atrial_fibrillation_afib_treatment_drugs/article.htm.
- ⁴ Aliot, E., Botto, G.L., Crijns, H.J., & Kirchhof, P. (2014). Quality of Life in Patients With Atrial Fibrillation: How to Assess It and How to Improve It. *Europace*, 16(6):787-96.
- ⁵ Avalere Health. Health Services Utilization and Medical Costs Among Medicare Atrial Fibrillation Patients. (2010, September). Accessed June 2020. Retrieved from https://avalere.com/research/docs/Avalere-AFIB_Report-09212010.pdf
- ⁶ Badhwar, V., Rankin, J.S., Damiano, R.J. Jr, Gillinov, A.M., Bakaeen, F.G., Edgerton, J.R., Philpott, J.M., McCarthy, P.M., Bolling, S.F., Roberts, H.G., Thourani, V.H., Suri, R.M., Shemin, R.J., Firestone, S., Ad, N. (2017). The Society of Thoracic Surgeons 2017 Clinical Practice Guidelines for the Surgical Treatment of Atrial Fibrillation. *Ann Thorac Surg*, 103(1), 329-341, DOI: 10.1016/j.athoracsur.2016.10.076.
- ⁷ Calkins, H., et al. (2017). 2017 HRS/EHRA/ECAS/APHRS/SOLAECE Expert Consensus Statement on Catheter and Surgical Ablation of Atrial Fibrillation. *Heart Rhythm*, 14(10):e275-e444, DOI: 10.1016/j.hrthm.2017.05.012.
- ⁸ January, C.T., 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):e1-e76, DOI: 10.1016/j.jacc.2014.03.022.
- ⁹ Meier, B., et al. (2014). EHRA/EAPCI Expert Consensus Statement on Catheter-Based Left Atrial Appendage Occlusion. *Europace*, 16(10):1397-416, DOI: 10.1093/europace/euu174.
- ¹⁰ Cox, J.L., et al. (1991). Successful Surgical Treatment of Atrial Fibrillation: Review and Clinical Update. *JAMA*, 266(14):1976-80, DOI:10.1001/jama.1991.03470140088029.
- ¹¹ Iribarne, A. et al. (2019). Surgical atrial fibrillation ablation improves long-term survival: a multicenter analysis. *Ann of Thorac Surg*, 107(1):135-42.
- ¹² Badhwar, V., et al. (2017). Surgical Ablation of Atrial Fibrillation in the United States: Trends and Propensity Matched Outcomes. *Ann Thorac Surg*, 104(2):493-500, DOI: 10.1016/j.athoracsur.2017.05.016.
- ¹³ Braid-Forbes, M.J. (2016, August). NIS for volume and Medicare to look back over 3 years and obtained diagnosis. Health Research, 2014 CMS SAF.
- ¹⁴ Rankin, J.S., Lerner, D.J., Braid-Forbes, M.J., McCrea, M.L., & Badhwar, V. (2019). Surgical ablation of atrial fibrillation concomitant to coronary-artery bypass grafting provides cost-effective mortality reduction. *J Thorac Cardiovasc Surg*.
- ¹⁵ Musharbash, F.N. et al. (2018). Performance of the Cox-maze IV procedure is associated with improved long-term survival in patients with atrial fibrillation undergoing cardiac surgery. *J Thorac Cardiovasc Surg*, 155(1):159-70.
- ¹⁶ Weimar, T., et al. (2011). The Cox-maze IV procedure for lone atrial fibrillation: a single center experience in 100 consecutive patients. *Journal of Interventional Cardiac Electrophysiology*, 31(1):47-54, DOI: 10.1007/s10840-011-9547-3.
- ¹⁷ Schill, M.R., et al. (2017). Late results of the Cox-Maze IV procedure in patients undergoing coronary artery bypass grafting. *J Thorac Cardiovasc Surg*, 153(5):1087-94, DOI: 10.1016/j.jtcvs.2016.12.034.

Clinical results are not predictive and individual results may vary.

ATRICURE, INC.

7555 Innovation Way
Mason, Ohio 45040
Customer Service: +1 (866) 349-2342
CustomerService@AtriCure.com
www.AtriCure.com
www.ACTagainstAfib.com