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How to Identify Atrial Fibrillation and What Might Help

Analysis by Dr. Joseph Mercola ✔ Fact Checked | June 27, 2023

STORY AT-A-GLANCE

- Atrial fibrillation (Afib) is an abnormal, often rapid, heart rhythm that can lead to serious complications, including stroke and heart failure
- Symptoms of Afib include lightheadedness, dizziness, fatigue, chest pain and a feeling that your heart is fluttering or pounding; sometimes Afib causes no symptoms
- Obesity, sedentary lifestyle, poor sleep and stress may increase your risk of Afib
- Lumbrokinase, a complex fibrinolytic enzyme extracted from earthworms, naturally thins the blood, which is useful for Afib patients, who are at increased risk of blood clots
- Oxidative stress and increased reactive oxygen species (ROS) can play a role in the development of Afib; ubiquinol and CoQ10 supplements help reduce oxidative stress

Atrial fibrillation (Afib)[1] is an abnormal, often rapid, heart rhythm that occurs when the atria, your heart's upper chambers, beat out of sync with the ventricles, the heart's lower chambers. It's a common symptom in those with heart failure or heart disease.

Afib is one of the most common arrhythmias, or irregular heart rhythms, affecting more than 2 million U.S. adults.[2] While it sometimes goes away on its own, it can often become more frequent, with episodes lasting longer. Because Afib can lead to serious complications, including stroke and heart failure,[3] it's important to know what to watch out for — and how to help prevent it.

What Is Atrial Fibrillation?

In a healthy heart, contractions occur about once per second at rest. During Afib, however, this increases significantly. According to Johns Hopkins Medicine:[4]

> *"In a person with Afib, faulty electrical signals make the atria contract irregularly and much faster than normal. The atria then get out of sync with the ventricles. Blood can pool in the atrium, which may lead to blood clots and strokes. Afib that causes the lower chambers to beat too quickly can cause heart failure. Afib may occur occasionally, or it can be constant."*

A normal heart beats 60 to 150 times per minute. But during Afib, the atria may contract 400 or more times a minute. "The ventricles become overwhelmed trying to keep up with the contractions. They beat faster than they should, and they may not have time to fill with blood and pump blood normally," Johns Hopkins explains. There are three types of Afib:

1. Paroxysmal Afib, which happens intermittently and resolves on its own within seven days.
2. Persistent Afib, which persists for more than seven days. Electric shocks known as cardioversion may be necessary to get the heart beating normally again.
3. Long-standing persistent Afib, which persists for more than one year.

What Are the Signs of Afib?

Because atrial fibrillation causes your heart's upper and lower chambers to work out of sync, your heart may not be able to pump blood to your lungs and elsewhere in your body effectively. Lightheadedness, dizziness and fatigue can result, as can chest pain.

Afib may also feel like your heart skipped a beat or is fluttering or pounding in your chest. It can lead to blood pooling in your chest, increasing your risk of blood clots that may lead to stroke.

The condition is also known to cause heart disease and worsen the condition if it already exists, but sometimes Afib causes no symptoms at all — making diagnosis difficult.[5] When symptoms do occur, atrial fibrillation may lead to:[6]

Angina, or chest pain caused by reduced blood flow to the heart	Dizziness
Fainting	Fatigue
Palpitations	Weakness
Shortness of breath	Blood clots
Heart failure	Stroke

Afib Risk Factors

Your risk of atrial fibrillation increases with age. While it's estimated that 2% of the general population worldwide suffers from Afib, this increases to 10% to 12% of those 80 and over.[7]

Inflammation and oxidative stress play a role in problems with atrial structure and "electrical remodeling" that may contribute to Afib, but, as noted in the International Journal of Molecular Sciences, "Undoubtedly, aging constitutes the primary factor responsible for the pathogenesis of the arrhythmia." Known Afib risk factors include:[8]

Age over 50 years	Excessive alcohol use	High stress levels
Heart failure	High blood pressure	Male sex
Obesity	Sedentary lifestyle	Sleep apnea
Poor sleep	Tall height	Thyroid disease

While genetics is also thought to play a role, especially when Afib occurs at younger ages, lifestyle changes may also influence the condition.

"Obesity, excessive alcohol use, and obstructive sleep apnea are all known to contribute …" the International Journal of Molecular Sciences researchers noted.[9] "As such, lifestyle and dietary modifications including weight loss, alcohol reduction, and cardiometabolic risk factor management would be a cornerstone for AF prevention." This includes:[10]

Maintaining a healthy weight	Avoiding excess alcohol
Being physically active	Managing stress
Not smoking	Consuming heart-healthy foods

Controversy Over Common Afib Drug

Medications including beta blockers, calcium channel blockers and blood thinners, such as Xarelto (rivaroxaban), are often prescribed to treat Afib. Xarelto is taken to thin the blood to prevent blood clots and strokes. However, it can trigger deadly bleeding, an adverse effect that The New York Times said consumers weren't adequately warned about.[11]

After the drug hit the market, reported episodes were serious and common enough that, in 2018, the U.S. Food and Drug Administration approved Andexxa to act as an antidote to stop bleeding caused by Xarelto.

Subsequently, about 25,000 lawsuits were filed against Johnson & Johnson and Bayer, which jointly sell Xarelto, claiming that the companies failed to warn patients about the drug's potentially fatal bleeding risks. Although they did not admit liability, the companies agreed to pay $775 million to settle the lawsuits in 2019.

Further, the drug may have been approved based on manipulated data. The research in question was published by researchers with Temple University in Philadelphia. In August 2022, The Journal of American College of Cardiology (JACC) retracted a paper[12] that concluded Xarelto "could have a healing effect on hearts."[13]

In addition to the retracted research study, the Journal of Molecular and Cellular Cardiology and the Journal of Biological Chemistry are investigating five more papers by the Temple University team.[14]

The U.S. Office of Research Integrity (ORI), which oversees research integrity activities on behalf of the Secretary of Health and Human Services, including oversight of research misconduct inquiries and investigations,[15] also requested in September 2020 that Temple University investigate the research. As a result, Temple University is also looking into 15 papers published from 2008 to 2020, which received grant money from the U.S. National Institutes of Health.[16]

Further, if you're taking Xarelto, you should know that a nationwide population-based cohort study published in 2021 found that, compared to other direct oral anticoagulants (DOACs), Xarelto was associated with higher rates of gastrointestinal bleeding.[17]

Specifically, compared to Eliquis (apixaban), manufactured by Bristol-Myers Squibb, Xarelto was 46% more likely to cause gastrointestinal bleeding. According to lead study author Dr. Arnar B. Ingason with the University of Iceland, Reykjavik:[18]

> *"We had this theory that rivaroxaban would have potentially higher risks of GI bleeding because it's given as a once-daily dose, compared to the other two drugs, which are given twice daily. Theoretically, this should cause greater variance in drug plasma concentration, making these patients more susceptible to bleeding."*

A 2016 study found similar results, noting, "In a population-based study of patients receiving DOAC agents, we found apixaban had the most favorable GI safety profile and rivaroxaban [Xarelto] the least favorable profile."[19]

Lumbrokinase Is a Better Option

One option for those looking to avoid Xarelto's risks is lumbrokinase, a complex fibrinolytic enzyme extracted from earthworms. As noted in the Institute for Progressive Medicine, this represents a potentially safer option for thinning your blood naturally:[20]

> *"Generally, we are better off with blood that clots less easily … Individuals at high risk of forming clots, such as those with atrial fibrillation, are often treated with blood thinners like aspirin or stronger agents like Coumadin … All of these agents, however, present a significant risk of bleeding, and may themselves cause brain hemorrhage, urinary or gastrointestinal bleeding.*
>
> *Lumbrokinase … reduces coagulation by lowering blood viscosity, lowering the activity of clotting factors including fibrinogen, and degrading fibrin, a critical factor in clot formation. It has a stronger effect on reducing blood viscosity than other enzyme preparations."*

Fibrinolytic agents like lumbrokinase, as well as serrapeptase and nattokinase, are proteolytic enzymes that act as natural anticoagulants by breaking down fibrin that forms blood clots. Fibrin, a clotting material that restricts blood flow, is found both in your bloodstream and connective tissue such as your muscles. Fibrinolytic enzymes are antihypertensive, anti-atherosclerotic, lipid lowering and antiplatelet agents, which also have neuroprotective effects.[21]

A study involving 12 men revealed that just one 2,000 FU dose of nattokinase enhanced fibrinolysis and anti-coagulation.[22] It activated multiple fibrinolytic and anti-thrombotic pathways simultaneously, the researchers explained. While all of the fibrinolytic enzymes are effective and beneficial, you'll need much higher doses of nattokinase and, especially, serrapeptase, than lumbrokinase to achieve similar effects.

So, if you are using a fibrinolytic enzyme, my strong personal preference and recommendation is to use lumbrokinase. It is important to understand that when using lumbrokinase for fibrinolytic therapy, it needs to be taken on an empty stomach, at least

one hour before or two hours after meals containing protein. Otherwise, the enzymes will be wasted in the digestion of your food and won't serve their fibrinolytic purpose.

CoQ10 Is Also Useful for Atrial Fibrillation

Ubiquinol — the reduced, electron-rich form of CoQ10 that your body produces naturally — plays an important role in the electron transport chain of your mitochondria, where it facilitates the conversion of energy substrates and oxygen into the biological energy (adenosine triphosphate, or ATP) needed by your cells for life, repair and regeneration.

It's a fat-soluble antioxidant, meaning it works in the fat portions of your body, such as your cell membranes, where it mops up potentially harmful byproducts of metabolism known as reactive oxygen species (ROS). As such, ubiquinol and CoQ10 supplements help protect your mitochondrial membranes from oxidative damage.

Oxidative stress and increased ROS can play a role in the development of Afib. Conversely, scavenging of ROS and a reduction in oxidative stress have been shown to be an essential part of keeping the heart functioning normally.[23]

In one study, 102 patients with Afib were divided into two groups. One group was given a CoQ10 supplement while the other group was given a placebo. After 12 months of supplementation, 12 people in the placebo group had Afib episodes compared to only three people in the CoQ10 group.[24] Levels of malondialdehyde, a known biomarker of oxidative stress, also went down significantly in the CoQ10 group.

Your body can naturally make CoQ10, but genetic alterations in metabolism, poor diet, oxidative stress, chronic conditions and aging can all interfere with CoQ10 production and lead to CoQ10 deficiency. Statin drugs can also deplete CoQ10.

Ubiquinol production ramps up from early childhood until your mid- to late 20s. By the time you hit 30, it begins to decline.[25] Young people are able to use CoQ10 supplements quite well, but older people do better with ubiquinol, as it's more readily absorbed.

If you're having chest pain or irregular heartbeat, you should seek medical attention. However, you may be able to support heart health and address health conditions like Afib by leading a healthy lifestyle and using supportive supplements like ubiquinol or CoQ10 and lumbrokinase.

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