Reducing Risk of Stroke When You Have Atrial Fibrillation

People with atrial fibrillation (AFib) or atrial flutter are five times more likely to experience a stroke compared with people who have a normal heart rhythm. The risk of stroke increases with age.

Medicines that keep the blood from clotting, called anti-coagulants, lower the risk of stroke but can also cause serious bleeding.

What Causes AFib-Related Stroke?

When a person has AFib or flutter, the atria—the two upper chambers of the heart—beat very fast or abnormally. Because of this, blood in the atria is not pushed out completely with each heartbeat. Blood may pool in the atria and form clots that can flow into the brain, causing a stroke.

Which Medicines Can Help?

Two types of anticoagulants—vitamin K antagonists (VKAs) and direct oral anticoagulants (DOACs)—are used to help reduce risk of AFib-related stroke. These medicines are sometimes called “blood thinners” even though they don’t actually thin your blood.

Doctors and patients have used a VKA called warfarin for many years. Warfarin requires frequent blood tests to ensure a patient has the right level of medicine in their blood. Patients using warfarin also need to avoid some foods with vitamin K, because they reduce the medicine’s effectiveness.

DOACs are newer anticoagulants that act differently from warfarin. They don’t require blood testing as often as warfarin. They also don’t require changes to your diet.

Types of Anticoagulant Medications

Vitamin K Antagonists (VKAs)	
Generic name	Brand name
Warfarin	Coumadin® Jantoven®

Direct Oral Anticoagulants (DOACs)	
Generic name	Brand name
Apixaban	Eliquis®
Dabigatran	Pradaxa®
Edoxaban	Savaysa®, Lixiana®
Rivaroxaban	Xarelto®

Findings

A 2018 update of a review of research found that some DOACs reduce the risk of stroke better than warfarin and that some were less likely to cause serious bleeding than warfarin.

Comparing DOACs with Warfarin in Reducing Stroke Risk and Bleeding Risk

Direct oral anticoagulants (DOACs)	Reducing stroke risk	Reducing bleeding risk
Apixaban (Eliquis)	Better than warfarin	Better than warfarin
Dabigatran (Pradaxa)	Better than warfarin	Same as warfarin
Edoxaban (Savaysa, Lixiana)	Same as warfarin	Better than warfarin
Rivaroxaban (Xarelto)	Same as warfarin	Same or somewhat worse than warfarin

Why Do I Need to Worry About Serious Bleeding?

Anticoagulants make it harder for your blood to clot. This means that if you fall, injure yourself another way, or bleed internally for any reason, it may be hard to stop the bleeding. Continued bleeding, especially from a head injury, can cause serious and urgent health problems that require immediate medical attention.

Medicines that reverse the effects of warfarin and DOACs take time to work. The medicines to reverse the effects of DOACs are new and may not be available when they are needed.

What Questions Should I Ask My Doctor?

Your doctor can help you assess your level of risk to help you make the best choice about starting or changing anti-coagulant medication. Here are some questions that you may want to ask.

- ▶ What is my risk of having a stroke from blood clots caused by AFib or atrial flutter?
- ▶ What is my risk of having serious bleeding, for any reason, while taking an anticoagulant?
- ▶ Given my health conditions, how does my risk of stroke or serious bleeding influence my choice of anticoagulant?
- ▶ What do I need to know and do to take care of myself while on a particular anticoagulant—such as what I can eat, how often I should get blood tests, and what I should tell my other doctors about my medication?

View the full systematic review update at www.pcori.org/reviews-AFIB

IMPORTANT! Never stop taking an anticoagulant without first talking to your doctor. Even if the medicine doesn't feel like it's doing anything, stopping your anticoagulant can increase your risk of stroke.

About the Evidence Researchers looked at 320 studies on anticoagulants for people with AFib. This 2018 report updated a previous report, adding findings from new studies published after 2013.

SOURCES

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