



BLOOD THINNERS AFTER STROKE

FIVE QUESTIONS FOR... *USE OF BLOOD THINNERS AFTER STROKE*

Shared decision-making helps patients and their health care providers make decisions together. Health care decisions should consider the best evidence and the patient's health care goals. This guide will help you and your neurologist talk about:

- Stroke
- Causes of stroke
- When blood thinners, also called anticoagulants, are needed for stroke prevention
- The risks and benefits of different blood thinners

1. WHAT IS A STROKE?

A stroke is an injury to the brain caused by blocked or burst blood vessels. Most often, lack of blood flow causes stroke. About one in five patients will have a stroke due to bleeding in the brain. Stroke symptoms come on suddenly and usually there is no way to know that the brain is in trouble until the stroke starts. Stroke symptoms depend on which part of the brain is injured. Many stroke patients have sudden weakness or numbness on one side of their body, difficulty speaking or understanding, or a change in vision.

A stroke is a medical emergency. If you think you or someone else is having a stroke, call 911 immediately. All stroke treatments are time-sensitive. If too much time passes, certain treatments cannot be offered.

There are two main types of stroke:

- Ischemic stroke happens when blood vessels are blocked. This leads to lack of blood flow to part of the brain.
- Hemorrhagic stroke is caused by burst blood vessels. This allows blood to leak into the brain.

2. WHAT ARE ANTICOAGULANTS?

Anticoagulants are drugs that work to prevent your blood from clotting. In some patients, they can reduce the risk of future strokes.

3. ARE BLOOD THINNERS RIGHT FOR ME AFTER A STROKE?

Treatment after stroke depends on what caused your stroke. Your physician will use blood tests, brain imaging, and heart monitoring to help determine what caused the stroke. Based on these tests, your physician will determine if a blood thinner will help to reduce your risk of future stroke.

Strokes caused by an irregular heart rhythm, called atrial fibrillation, often require blood thinning medications to reduce the risk of future stroke. If your physician recommends blood thinners, be sure to have a thorough discussion about your choices of blood thinners along with their respective risks and benefits. One of the most serious side effects of blood thinners is the risk of heavy bleeding. Some patients are at a higher risk of bleeding than others and your physician will be able to discuss this risk with you in detail.

Ask your physician if the blood thinner interacts with any of your current medications. It is possible that you will need to make changes to your medication regimen if you start blood thinners, particularly if you are already taking an antiplatelet medication such as aspirin. Tell your doctor if you have trouble remembering to take daily medications as compliance with blood thinners is necessary for the medication to work. Inform your doctor if you are pregnant or may become pregnant in the future.

There are several types of blood thinners, each with risks and benefits:

Drug	Drug Facts	Potential Risks and Side Effects
Warfarin (Brand name: Coumadin)	<ul style="list-style-type: none"> • Tablets taken daily • Requires regular blood tests to monitor the blood's ability to clot • Dose might change over time based on blood test results 	<ul style="list-style-type: none"> • Risk of bleeding and bruising • Major side effects include rash and signs and symptoms of internal bleeding (dizziness, headache) • Other medications will affect your body's ability to process warfarin. Talk to your doctor if you are taking other medications. • Alcohol and certain foods like green, leafy vegetables may affect your body's ability to process warfarin. Talk to your doctor about this.
Dabigatran (Brand name: Pradaxa)	<ul style="list-style-type: none"> • A tablet taken twice a day • Does not require regular blood tests • Dose is based on your kidney function 	<ul style="list-style-type: none"> • Risk of bleeding and bruising • Major side effects include upset stomach and signs and symptoms of internal bleeding (dizziness, headache)
Apixaban (Brand name: Eliquis)	<ul style="list-style-type: none"> • A tablet taken twice a day • Does not require regular blood tests • Dose is based on age, body weight, and kidney function 	<ul style="list-style-type: none"> • Risk of bleeding and bruising • Major side effects include signs and symptoms of internal bleeding (dizziness, headache)
Rivaroxaban (Brand name: Xarelto)	<ul style="list-style-type: none"> • A tablet taken daily • Does not require regular blood tests • Dose is based on kidney function 	<ul style="list-style-type: none"> • Risk of bleeding and bruising • Major side effects include signs and symptoms of internal bleeding (dizziness, headache)

For more information regarding safety and side effects, visit Medline Plus at NLM.NIH.gov/MedlinePlus/MedlinePlus.html.

4. HOW CAN I TALK WITH MY DOCTOR ABOUT REACHING A TREATMENT DECISION?

- Ask for information on what caused your stroke.
- Discuss whether a blood thinner will reduce your risk of future stroke.
- Talk about the risks and benefits of each possible medication, including your risk of bleeding.
- Discuss how blood thinners will interact with your current medications, particularly if you are currently taking an antiplatelet medication such as aspirin.
- Costs can vary greatly among blood thinners, and this is an important part of choosing a medication. Find out if your insurance covers your blood thinner and what you will have to pay.

5. REFERENCES

- The AHA/American Stroke Association: StrokeAssociation.org/STROKEORG/
- The National Stroke Association: Stroke.org/
- Culebras A, Messe SR, Chaturvedi S, et al. *Summary of evidence-based guideline update: Prevention of stroke in nonvalvular atrial fibrillation: Report of the Guideline Development Subcommittee of the American Academy of Neurology.* *Neurology* 2014;82:716-724.

The American Academy of Neurology recognizes that specific patient care decisions are the prerogative of the patient and the physician caring for the patient, based on all of the circumstances. This statement is provided as an educational service of the AAN. It is based on an assessment of current scientific and clinical information. It is not intended to include all possible proper methods of care for a particular neurologic problem or all legitimate criteria for choosing to use a specific procedure. Neither is it intended to exclude any reasonable alternative methodologies.