

What are blood thinners and aspirin?

There are two main types of drugs that work against blood clots: *anticoagulants* and *antiplatelets* (including aspirin). Both work in slightly different ways to thin the blood and make it less sticky, preventing blood clots from forming. Blood clots, while a normal part of the body's response to injury, can cause problems if they become lodged in an artery or vein and block blood flow to the heart or other organs.

Women with heart failure are at increased risk of developing blood clots because, as the heart's pumping ability gets worse, blood is allowed to sit still for longer inside the heart and in the blood vessels in the legs and arms.¹ Blood that is not moving is more likely to form clots. The chemical makeup of the blood in women with heart failure also makes clots more likely to form.²

The most common blood thinning medications in patients with or at risk for heart failure are the anticoagulant warfarin (Coumadin) and the antiplatelet drugs aspirin and clopidogrel (Plavix).

What are they used for?

Blood thinning drugs are used to prevent blood clots in women with a variety of heart and blood vessel diseases, including [heart failure](#) , [coronary artery disease](#) , [stroke](#), [atrial fibrillation](#) , and [heart valve disease](#) . They are also used to open up blood vessels after a heart attack, and during and after procedures to restore blood flow to the heart such as [angioplasty](#) , and [bypass surgery](#) .

Who should take blood thinners or aspirin to prevent heart failure?

All women who have already had a heart attack or stroke, or who have had a procedure to treat [coronary artery disease](#) such as angioplasty or bypass surgery, should take daily aspirin (75 mg to 325 mg) to prevent future heart problems and heart damage that could lead to heart failure. (Women older than 55 without a history of heart disease may also benefit from daily aspirin to reduce stroke risk; [click here](#) for more details about women and preventative daily aspirin.)

Women who are at high risk for heart failure, or have early changes to the structure of the heart but have never experienced [symptoms](#), may be given blood thinning medications to treat other conditions that increase blood clot risk. Examples include coronary artery disease, valve disease, and atrial fibrillation. ³ Getting these conditions under control lowers the risk of future heart problems, including further heart damage that could lead to heart failure.

Who should take blood thinners or aspirin to treat heart failure?

Blood thinning medications should be given to women with symptoms of heart failure who also have other conditions that put them at increased risk for blood clots. Because of the combined clot risk from heart failure and the other conditions, blood thinning medication is crucial to prevent future strokes, heart attacks, and damage to the heart that could make heart failure worse.

The anticoagulant warfarin should be taken to prevent blood clots and strokes in women with heart failure who have atrial fibrillation, have suffered a heart attack or stroke in the past, or have a family history of blood clotting problems.³

Antiplatelet drugs such as aspirin or clopidogrel (Plavix) should be given to women with heart failure who have coronary artery disease to prevent heart attacks and improve survival.³ In analysis of 6797 patients in studies of heart failure treatments (only 14% were women), patients treated with an antiplatelet drug had a 24% lower risk of sudden death caused by heart disease compared with their counterparts who were not receiving the drugs.

⁴

Results in women were not analyzed separately, although women had a lower overall risk of

dying suddenly.

Should blood thinners be used in patients who have heart failure but no other risk conditions?

It is not clear if women with [symptoms of heart failure](#) but no other conditions that increase their risk of developing blood clots benefit from treatment with blood thinning medications or aspirin. The results of the few available studies in these patients have so far been mixed.

3

Research on warfarin in these patients has not been able to consistently show a benefit, and warfarin carries a serious risk of dangerous bleeding complications. While some analyses of heart failure patients have found that taking warfarin lowered the risk of dying or being hospitalized for heart disease in both women and men, others have found no benefits of treatment.^{5,6}

Studies of aspirin in patients with heart failure have also failed to find evidence of a benefit so far.⁷ For example, among 279 patients (26% were women) in a study comparing warfarin and aspirin with placebo, there was no difference in the risk of heart attack or stroke within 2 years in patients taking warfarin or aspirin compared with those who had received no blood thinning drugs.⁸ There are also concerns that taking aspirin may blunt the benefits of [ACE](#)

[inhibitors](#), one of the first-choice heart failure medications, when the two medications are taken together.^{9,10}

Other studies have found that the benefits of ACE inhibitors were unaffected by aspirin.^{11,12}

Clopidogrel may be less likely to interact with ACE inhibitors, but studies have not shown clear benefits for this drug either in heart failure patients without other blood clot risk factors.

3,13

One recent study compared warfarin, aspirin, and clopidogrel in 1587 patients with systolic heart failure (only 15% were women) and found that no treatment was significantly better than the others.¹⁴ Warfarin reduced the chances of hospitalization for heart failure, but it also increased the risk of bleeding complications compared with aspirin. The study included too few women to determine if they reacted differently to the medications than men.

Studies are currently underway to determine what is the best course of treatment in patients who have heart failure but no other major risk factors for blood clots. For now, this is a decision that needs to be made after carefully considering your personal risks and benefits with your doctor.

See also: [Blood Thinners & Stroke](#)

Who should not take blood thinners and aspirin?

Women who are at low risk for heart disease and stroke should not take daily aspirin to prevent future heart problems because the risks of bleeding problems outweigh the potential benefits.¹⁵

You should not take daily aspirin (or most other painkillers) if you drink more than three alcoholic drinks per day. This combination increases your risk of liver damage and bleeding in the stomach. You should not take these medications if you have ever been allergic to them, are currently bleeding (such as from a stomach ulcer), or have recently had a surgical procedure.

Women who are pregnant or may become pregnant should not take warfarin. The safety of aspirin and clopidogrel during pregnancy and nursing are not known, so they should only be used when clearly necessary. You should avoid aspirin during the last 3 months of pregnancy unless your doctor has told you it is safe.

My doctor has prescribed blood thinners. What should I watch out for?

Warfarin

If you have been prescribed warfarin, you will need to be closely followed and frequently tested to prevent your blood from becoming too thin or too thick. This process can be frustrating and bothersome, and it may take several weeks of adjustments before finding the best dose for you.

Warfarin can cause excessive bleeding from even minor cuts such as a razor nick. If you have to take warfarin, you will be advised to avoid activities that might cause injury. Your diet can affect how well warfarin works, so you will need to restrict foods that contain vitamin K, a vitamin involved in blood clotting. These include green vegetables (such as lettuce and broccoli), avocado and egg yolks.

Women taking warfarin for 3 to 10 weeks or longer may develop purple toe syndrome, in which the toes and feet turn a dark, purple, or mottled color that fades if you raise your legs. This side effect can be reversed, but if left untreated, it may cause gangrene.

Blood Thinners & Aspirin Warning Signs (Warfarin, Coumadin, Aspirin)

Talk to your doctor immediately if you experience any of these symptoms:

- Bruising or unusual bleeding
- Black or bloody stool
- Vomit that contains blood or looks like coffee grounds
- Fever, chills, or flu-like symptoms
- Joint or muscle aches
- Pale skin
- Your toes or feet turn a dark, purple, or mottled color that fades if you raise your legs (purple toe syndrome)

Seek emergency medical attention if you experience any of these signs of an allergic reaction:

- Hives, rash, or itching
- Swelling
- Faintness, dizziness, loss of consciousness
- Difficulty breathing
- Numbness or tingling
- Chest pain or pressure

Aspirin & Clopidogrel

The most serious side effect of regular aspirin use is bleeding in the stomach, which is more common in people older than 70 years. Serious bleeding is rare (less than 3% of patients taking regular aspirin), but is 40% more likely to occur in women.¹⁶ Women are also more likely to

experience minor bleeding and bruising with prolonged aspirin use.

17

More common side effects include upset stomach and nausea. Enteric-coated or buffered aspirin may reduce these side effects, but there is no evidence they are safer.

The side effects of clopidogrel are similar to those of aspirin, including bleeding in the stomach in about 2% of patients.¹⁶

Nonsteroidal anti-inflammatory drug (NSAIDs such as Aleve, Advil, Motrin) should be avoided in people who are taking regular aspirin because they increase the risk of serious side effects and death when combined with aspirin; these drugs can also make your heart failure worse, so they should not be taken by anyone with heart failure symptoms.³

See also: [Medications to Avoid](#)

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