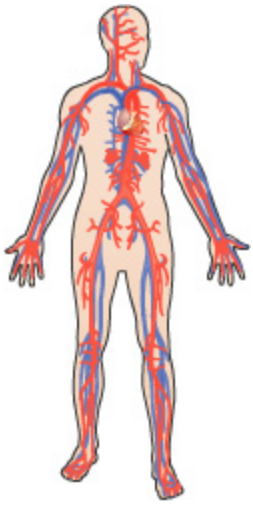
Warfarin - Introduction for New Users

Introduction



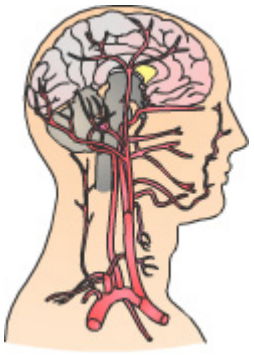
Blood clots are frequent in patients who have diseases of the blood vessels or heart. Blood clots may pose a dangerous threat to some people, as they may cause loss of a limb, strokes, and even death.

Your doctor may ask you to take a blood thinner to help prevent harmful blood clots. Warfarin is a frequently used blood-thinning medication. This reference summary will help you understand better the benefits and risks of warfarin.

Benefits of Warfarin

Blood contains natural substances that cause it to clot. When a person bleeds as a result of an injury, the natural clotting substances in the blood cause the blood at the injury site to harden forming a seal. These "good clots" help minimize blood loss from the injury site.

Some patients with diseases of the blood vessels and heart, or who are limited in their mobility following surgery, can form harmful blood clots inside the blood vessels, called thrombi. These clots can get bigger and block the flow of blood within blood vessels. They can also move within the body. Body parts which stop receiving blood because of a thrombus can be damaged considerably.



A blood clot or thrombus in the arteries of the brain can stop the blood flow to a part of the brain and lead to a stroke. The symptoms of a stroke are weakness, numbness, confusion, problem speaking or understanding, vision impairment, total paralysis and even death.

A heart attack results when a thrombus stops blood flow to the heart. The symptoms of a heart attack are chest pain, shortness of breath, possible arm and jaw pain, losing consciousness and possibly death.

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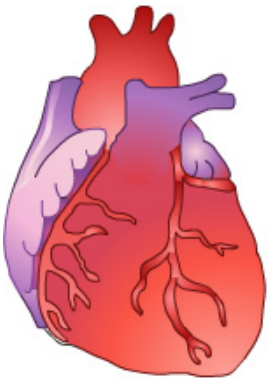
A blood clot in the arteries that go to one of the extremities, be it an arm or a leg, can lead to the extremity experiencing severe pain, feeling cold, and possibly even becoming gangrenous. This may make amputation necessary.

A pulmonary embolism occurs when a thrombus stops blood flow to the lungs. This may lead to shortness of breath and the possibility of death.

Although all people are at some risk of forming harmful blood clots, patients with cardiovascular diseases, irregular heart beat, implanted medical devices, or on bed rest are at higher risk.

To reduce the risk of harmful blood clots, doctors may ask patients to take a medicine called a blood thinner. Warfarin is a commonly prescribed blood thinner.



Warfarin decreases the ability of the body to form clots. This makes it less likely that harmful blood clots will form inside the heart and blood vessels or around implanted devices such as mechanical valves.

Your doctor will tell you for how long you will have to take warfarin. Some patients may have to take warfarin forever.

Risks of Warfarin

Like any other medicine, warfarin poses some risks, which you should know about. By understanding how they arise you will be able to avoid them or detect them early if they happen.

Because warfarin reduces the ability of the body to form blood clots, a patient on warfarin will bleed longer after an injury than a patient who is not on warfarin. Longer bleeding can result in an excessive loss of blood if the person is involved in an accident. Severe blood loss can be fatal. Bleeding inside the brain, even after minor accidents, can also be deadly.

In addition to the risks associated with bleeding after accidental injuries, faster bleeding also poses a potential risk when bleeding occurs inside the body. For example, if there is bleeding in the stomach caused by an ulcer, the body cannot easily stop this bleeding. This can cause dangerous situations that may be fatal.

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For these reasons, your doctor will give you enough warfarin to thin your blood without thinning it too much. If the blood is not thin enough, blood clots inside the blood vessels and heart may form. If, on the other hand, the blood is too thin, you risk a longer bleeding time. The solution is to take the amount of warfarin requested by your doctor AND to check how thin your blood is on a regular basis.

Warfarin is not rat poison. It is similar to a chemical used in certain rat poison products, but it is different, used in smaller amounts and carefully monitored to make sure it is not toxic.

Taking Warfarin

Warfarin pills come in different colors. Each color contains a different dosage of warfarin. Your doctor will indicate the dosage which is best for you and when to take it.

Genetic variations among patients may cause some to be more sensitive to warfarin. Genetic testing is available to find out if you are very sensitive to warfarin. If you are, you may need to be given a lower than normal dose. Ask your doctor about it.

Patients who take warfarin on a daily basis are required to take the pill at the same time of the day.

Your doctor will start by giving you the dose of warfarin which is expected to be the most effective for you. The amount of warfarin your doctor gives you may be adjusted if the dosage is found to be too high or too low. If your blood is too thin, your doctor will reduce your dose of warfarin. If your blood is not thin enough, your doctor will increase the dose.

To determine whether or not the dosage of warfarin which your doctor has recommended is appropriate for you, the doctor or nurse will take a small amount of your blood and do a prothrombin time test, also known as a protime, PT test, or INR test.

The Protime Test

To perform a protime test, a nurse or lab technician will draw about 5cc of blood from an arm vein. In the blood lab, chemicals will be added to the blood sample to determine how thin it is.

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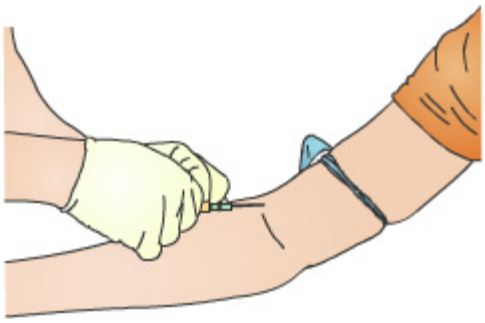
The results of the PT/INR test are usually available to your doctor a few hours after your blood is drawn or within 2 hours if needed urgently.



A PT/INR test provides two important numbers. The prothrombin time, which is called PT, and the International Normalized Ratio or INR. Both of these tests indicate how thin the blood is.

In patients who are not taking any blood thinner the PT is about 12 seconds and the INR is about 1. In patients taking blood thinners, both values are higher.

Different medical conditions necessitate different ranges of INR. Your doctor will tell you the range within which your INR should be.

If the INR number is lower than it should be, the doctor will ask you to take a higher dose of warfarin. If the INR number is higher than it should be, the doctor will ask you to take a lower dose of warfarin.

Controlling Your Protime

Although the prescribed amount of warfarin should help keep your INR within acceptable limits, illness, diet, exercise, and other medications you are taking may affect how thin your blood is. This is why your doctor will ask you to have your INR number checked regularly.

Fortunately, there are several things you can do to prevent sudden changes in your INR and keep your blood as thin as it should be.

To keep your blood as thin as it should be, you should:

- Take the dosage of warfarin prescribed by your doctor, always at the same time of the day.
- Keep your eating habits regular.
- Keep your exercise level regular.
- Have your protime checked regularly.

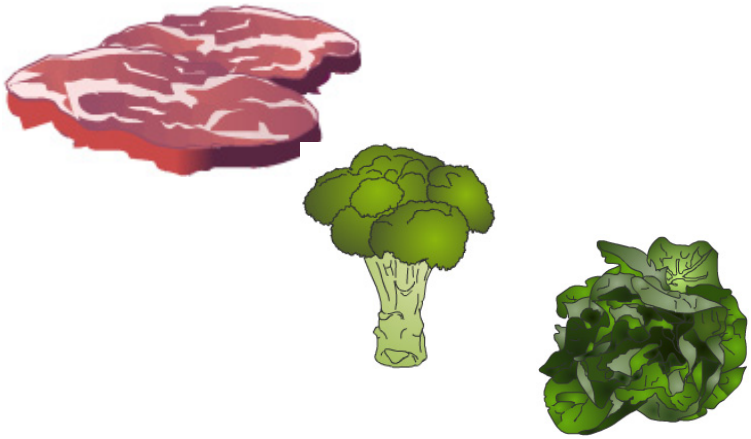
Check with your pharmacist and doctor before taking ANY new medications, especially over-the-counter medications, antibiotics, vitamins and herbal products.

Talk with your doctor about aspirin containing products. Avoid aspirin like products, such as Advil® and Aleve®. For over-the-counter pain relief, discuss acetaminophen as an option with your doctor. Inform your doctors of any new or unusual symptoms. You should follow your doctor's instructions when you take warfarin. If you miss a dose of warfarin, do not take an extra pill to "catch up."

Maintaining regular daily activities, including consistent eating and exercise habits, will make it less likely that your doctor will need to change your dosage of warfarin.

Because having too much food with Vitamin K in your system may lower your protime, it is important to keep the amount of Vitamin K in your diet steady. The following foods are high in Vitamin K:

- beef liver,
- pork liver,
- green tea,
- broccoli,
- chick peas,
- kale,
- green turnips,
- Brussels sprouts,
- parsley,
- and spinach.



If you have any questions about any other diet item, check the warfarin manual or call your physician or pharmacist. Be extra careful not to vary the amount of green, leafy vegetables you eat. Consume small amounts consistently or avoid V8® products and products that contain cranberry, and grapefruit. Green tea can also cause variations in your INR if not consumed consistently.

Avoid excessive use of alcohol. If you drink alcohol, limit the amount of alcohol you drink to small regular quantities. The more similar your activities and exercising habits are every day, the less likely it is that your doctor will change the amount of warfarin you take.

It is important to have your protime checked regularly. Your doctor will tell you how frequently you should have this blood test performed. Once your doctor receives your test results from the lab, he or she will tell you whether you should increase or decrease the amount of warfarin you take and by how much.

Patients on warfarin should ask their pharmacist and physician before starting any new medications, especially antibiotics and EVEN over-the-counter medications.

Make sure to tell all your healthcare providers, including your dentist, that you are on warfarin, especially if any type of surgery or injection is contemplated.

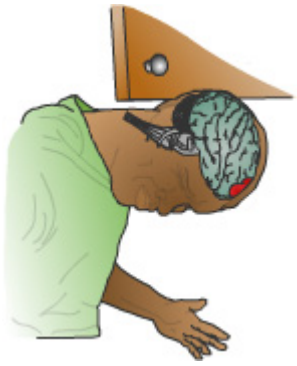
As a patient on warfarin, you should always tell your doctor if you are pregnant or may become pregnant. Warfarin could cause serious malformations in a small percentage of unborn babies when taken during the first trimester of pregnancy. It can also cause excessive bleeding during delivery.

If you use knives when preparing food, be extra careful. Razors and hard toothbrushes can cause bleeding; use an electric shaver and a soft toothbrush instead.

It is recommended that patients who are on warfarin wear a Medical Alert bracelet. This is especially important in cases of medical emergencies when you are unable to communicate with your doctors.

When to Call Your Doctor

Even if you are taking the prescribed amount of warfarin, dangerous internal bleeding or blood clots can still happen. It is therefore very important to report to your physician ANY signs of internal bleeding or blood clots. This section discusses when you should call your doctor.



You or one of your family members or friends should call your doctor if you have a serious fall or hit your head, especially if you develop a headache or if you become sleepy or weak. The doctor may want to check that you do not have bleeding within the brain.

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If you notice any blood in your urine or stools or if the urine or stool turns very dark, call your doctor. The doctor may want to check that you do not have internal bleeding in your digestive or urinary systems.

If you notice unusual bruising, large areas of bruising,or black and blue marks on your skin for unknown reasons, you should inform your doctor. This may mean that you are bleeding under your skin. Small bruises that result from minor accidents, such as a leg hitting the furniture, are normal and do not require an automatic call to the doctor.

Check with your doctor if you experience dizziness, trouble breathing, chest pain, or if you feel weak or more tired than usual. These can be the signs of blood loss and anemia.

Call your doctor when there is bleeding that does not stop from cuts or from your nose. Call your doctor if the bleeding does not stop after approximately seven minutes. Call your doctor if you notice more bleeding than usual when you brush or floss your teeth.

Tell your doctor if you notice more bleeding than usual when you get your menstrual period or bleeding between periods.

If you have a high fever or an illness that seems to be getting worse, check with your doctor. You should also check with your doctor if you notice any blood when you cough or vomit, or if you have loose or runny stools (diarrhea), or have an infection with high fevers and chills. If you experience pain or swelling in any of your joints, check with your doctor, as you could be bleeding inside the joint.

Summary

Warfarin helps reduce harmful blood clots in the body. About two million patients in America use blood thinners to prevent complications from harmful clots.

Warfarin is a relatively safe medication if you take it properly, check your protime regularly, keep your eating and exercise habits steady, and communicate with your doctor when needed.

This reference summary helps you learn about the benefits and risks of warfarin. Your doctor may refer you to the anticoagulation clinic. Its staff has the expertise and clinical skills to monitor your warfarin therapy.