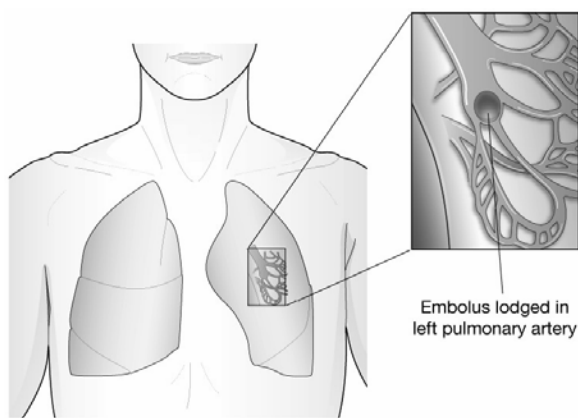


Deep Vein Thrombosis (DVT) and Pulmonary Embolism (PE) Prevention and Treatment

What are DVT and PE?

A deep vein thrombosis (DVT) is a blood clot that forms inside the deep veins of the body, most often in the legs. DVTs alone are not life threatening. If the clot breaks free and moves to the lungs, it can stick in blood vessels there. This is called a pulmonary embolism (PE). A PE is dangerous and can be life-threatening. The chance of getting a PE is fairly low.



Pulmonary embolus

Risk Factors

- Being hospitalized
- Older age
- Surgery
- Broken bone
- Heart problems
- Being overweight
- Birth control pills
- Hormone replacement therapy
- Blood clotting problems
- Little activity
- Diabetes
- Smoking
- Cancer
- Infection

Prevention

If you are at risk for a DVT or PE, there are ways to try to prevent it.

Medicine (Shots)

Most patients in the hospital who are at risk of getting a clot are prescribed a blood thinning medicine. Often, the best medicine to prevent a clot while in the hospital is an injection that goes in your belly. Depending on your risk and the medicine your doctor thinks is best for you, you could get this medicine up to three times per day. The most common shots we give are heparin or lovenox/enoxaparin. You need to take this medicine every time your nurse brings it to you as it works best when given as ordered by your doctor. It is normal for these shots to hurt or burn and to leave small bruises where they were given. This medicine is often stopped when your risk of blood clot goes down, such as when you leave the hospital or return to your normal activity level.

Medicine (Pill)

Some patients may need to go on a blood thinning medicine longer than their hospital stay. In this case, your doctor may prescribe a blood thinning pill that you take by mouth. There are multiple drugs that can be used to help thin your blood. You and your doctor will discuss which medicine is right for you and the information you need to know to keep safe while taking these drugs.

Leg Pumps/SCDs

These sleeves go over your legs or feet and fill up with air, squeezing the leg to help increase blood flow and may decrease your chance of getting a blood clot. These should

be worn at all times when you are in bed. If we use a ceiling lift to help get you up to the chair, we may suggest that you wear them while you are up in your chair as well.

Walking/leg exercises

If you are able, you may also be asked to go for walks. You may also be asked to do exercises that help improve the blood flow in your legs while in your bed or chair.

Compression Socks

These tight elastic stockings are often used for leg swelling or edema. Sometimes your doctor may want you to wear them to help increase blood flow in your legs and they may decrease your chance of getting a blood clot. If you wear these you need to take them off each day to wash the skin below and to make sure no sores develop.

When you go home after surgery or being in the hospital you are still at risk for a blood clot. You need to know the signs and symptoms written below. Call your doctor if you have any of these signs or symptoms. If you are having chest pain or breathing problems, go to your local ER. Getting out of bed to a chair and walking are ways you can help prevent a blood clot once you go home.

Signs and Symptoms of DVT

- Pain in arm or leg
- Swelling or redness in arm or leg
- Warm spot in arm or leg

Signs and Symptoms of PE

- Chest pain, shortness of breath
- Rapid heartbeat or breathing
- Low grade fever
- Cough, with or without blood

How is a DVT diagnosed?

The most common test to find out if you have a DVT is the Doppler scan or Doppler ultrasound.

How is a PE diagnosed?

The most common test to find out if you have a PE is a CT scan. A chest x-ray or magnetic resonance imaging (MRI) may also be used.

Treatment

Most DVTs and PEs are treated with blood thinning medicines. These are the same medicines that can be used to **prevent** DVT and PE from forming. They are used in higher doses or for longer periods of time when used to **treat** a DVT or PE. Blood thinners will help prevent a clot from getting bigger and new clots from forming. Blood thinners can be given by mouth, by injection into the skin or into the vein (IV).

Compression socks are often used to help increase blood flow while the clot dissolves. You should keep the arm or leg that has a blood clot raised above the level of your heart. This helps to decrease swelling as the clot shrinks. Some patients who have a very high risk for blood clots have a filter placed in a large blood vessel. This prevents a DVT in the leg from moving up to the lung. It would be placed by a surgeon in the operating room.

At Home

Some patients have good results from blood thinners at home, even if they do not have a blood clot. These blood thinners are often used for about 2-4 weeks after hospital discharge. If you will be using a blood thinner that is injected into the skin, be sure you know how to give this medicine.

If you have a blood clot, follow instructions with care. If you need to have a blood test, be sure to know when to have it drawn and who will follow up on the result. Most patients who have a blood clot will need to be on a blood thinner for at least 3 months.

Some patients may be told to stay on blood thinners longer.

Call your doctor if you have:

- Unusual bruising or bleeding
- Chest pain
- Shortness of breath
- Blood when you cough or vomit
- Black stools that look like tar
- New or increased pain or swelling in your leg or arm

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright ©3/2018 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#7522