Treating Blood Clots

About deep vein thrombosis (DVT) and pulmonary embolism (PE) and how they are treated

This handout explains blood clots, their symptoms, and how they are treated.

What is a blood clot?

Blood clots occur when blood thickens, forms clumps, and stops flowing normally. When clots form inside a blood vessel or organ, they can be dangerous.

What is a deep vein thrombosis?

A deep vein thrombosis (DVT) is a blood clot that forms inside a vein. Most DVTs form in leg veins, either above or below the knee, but they can also occur in other areas.

If DVTs are not treated right away, the clots can break apart and travel to other parts of the body. A piece of blood clot that travels to another part of the body is called an embolus.

What causes a DVT?

DVTs can occur:

- After surgery or an injury
- When you are inactive for a long time, like being in the hospital or in bed while you are ill
- After long trips in a car or plane

Your risk of getting a DVT is higher if you have certain diseases or are taking certain medicines that increase the risk of blood clotting. But, DVTs sometimes occur without a clear cause.
What are the signs of a DVT?
The most common signs of a DVT are:

- Swelling in the affected leg (or arm)
- Pain or tenderness in the affected leg (or arm)
- Redness or color changes in the affected leg (or arm)

What is a pulmonary embolism?
Clots that form in veins can travel to other parts of the body, including the lungs. A blood clot in the lungs is called a pulmonary embolism (PE). A PE may occur with no clear cause.

A PE can be life-threatening because it cuts off the blood supply to the lungs. It must be treated right away.

What are the signs of a PE?
The most common signs of a PE are:

- Chest pain
- Rapid heart beat
- Shortness of breath
- Cough

How are blood clots treated?
Blood clots are treated with blood-thinning medicines (anticoagulants). These medicines do not dissolve the existing clot. Their main action is to keep your blood from clotting as easily. Your body will dissolve your existing clot by itself over time.

The main goals of DVT and PE treatment are to:

- Stop a blood clot from getting larger
- Keep new blood clots from forming

What medicine will I receive?
Your provider and pharmacist will work with you to choose the best medicine for you. The medicine you receive depends on:

- What caused your blood clot
- Other diseases and health problems you have
- Your body weight
- How well your kidneys work
- Other medicines you take
- Medicine costs and your insurance coverage
How will I receive the medicine?

Depending on the medicine your provider prescribes, you may receive it:

- As an *intravenous infusion* (liquid given into a vein through a tube called a *catheter*). These medicines include:
  - Heparin
  - Bivalirudin

- As an under-the-skin (*subcutaneous*) injection given once or twice a day. These medicines include:
  - Heparin
  - Enoxaparin (Lovenox)
  - Dalteparin (Fragmin)
  - Fondaparinux (Arixtra)

- As a pill or liquid, taken by mouth once or twice a day. These medicines include:
  - Warfarin (Coumadin)
  - Apixaban (Eliquis)
  - Edoxaban (Savaysa)
  - Dabigatran (Pradaxa)
  - Rivaroxaban (Xarelto)

You will receive more information about the medicine(s) your provider prescribes for you.

**About Subcutaneous Injections**

If you are started on a medicine that is given as an injection, you will be admitted to the hospital. Most patients also start taking one of the oral medicines at the same time.

**What do I need to do next?**

- After you go home, follow up with your PCP. (See “When do I need to see my provider again?” below.) Be sure to meet with your PCP before you run out of your blood-thinning medicine.

- Wear compression stockings if your doctor prescribed them. They will improve blood flow in your legs and help keep more clots from forming.

- Keep all of your follow-up visits with your PCP or Anticoagulation Clinic.
When do I need to see my provider again?

When you need to see your primary care provider (PCP) depends on which oral medicine you are taking. If you are taking:

- Warfarin (Coumadin), see your PCP within 3 to 5 days
- Any other oral medicine, see your provider within 7 days

If you do not have a PCP, call one of these clinics:

- If you are a patient at University of Washington Medical Center (UWMC), call the UWMC Anticoagulation Clinic at 206.598.4874.

- If you are a patient at Harborview Medical Center (HMC), call the After Care Clinic at 206.744.6325. If you are taking warfarin, also call the HMC Anticoagulation Clinic 206.744.2976 and set up a clinic visit.

How long will treatment last?

Most blood clots are treated for 3 months. But, some people need to take blood-thinning medicine for longer than 3 months. Some people may need to take their medicine for the rest of their lives. Your doctor and pharmacist will decide the best treatment for you based on your needs.

Do blood-thinning medicines cause side effects?

Bleeding is the most common side effect of taking anticoagulants. Some blood-thinning medicines require special monitoring and dose changes to avoid bleeding.

When taking a blood-thinning medicine, you will need to:

- Hold pressure on cuts for longer than usual to stop bleeding.
- Tell your dentist or other providers that you are taking a blood-thinner if you are having a procedure where bleeding could occur.
- Avoid alcohol or drink it in only very small amounts. Tell your PCP if you change your alcohol intake.
- Not use tobacco products, including cigarettes, chewing tobacco, and e-cigarettes. If you need help quitting, talk with your PCP.
- Avoid contact sports. It can be very dangerous if you hit your head or if your head or body gets hit with a lot of force.
- Wear a medical alert bracelet or carry a medical alert card that says that you are taking a blood-thinning medicine.
When to Call
Call your provider or your Anticoagulation Clinic, or come to the hospital emergency department right away if you:

- Have a serious fall
- Hit your head
- Have any of these signs of bleeding:
  - Red or dark brown urine
  - Red or black, tarry stool
  - Vomiting or coughing up blood
  - Severe headache or stomachache
  - A lot of bruising, or bruises that occur without a cause
  - Very large bruises at the injection sites (if you are taking a medicine that is injected)
  - Nosebleeds that happen often, bleeding gums, or unusual bleeding
  - Any bleeding that will not stop or is very heavy
- Have any of these signs of clotting:
  - New or worse pain, swelling, or redness
  - Heat in your arm, leg, or foot
  - New or worse shortness of breath or chest pain
  - A rapid heartbeat
  - New cough
  - Coughing up blood

IMPORTANT:
Do Not Run Out of Your Medicine
Return to the Emergency Department if you:
- Are running out of your blood-thinning medicine, and
- Cannot get your prescription refilled, and
- Cannot reach your PCP or your Anticoagulation Clinic