

Visited 11/15/2019



Search Mayo Clinic



Log in to Patient Account

Request an Appointment

Find a Doctor

Find a Job

Give Now

English



Patient Care & Health Information > Diseases & Conditions

Deep vein thrombosis (DVT)



Request an Appointment

Symptoms & causes

Diagnosis & treatment

Doctors & departments

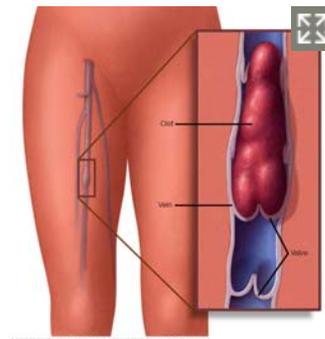
Overview

Print

Deep vein thrombosis (DVT) occurs when a blood clot (thrombus) forms in one or more of the deep veins in your body, usually in your legs. Deep vein thrombosis can cause leg pain or swelling, but also can occur with no symptoms.

Deep vein thrombosis can develop if you have certain medical conditions that affect how your blood clots. It can also happen if you don't move for a long time, such as after surgery or an accident, or when you're confined to bed.

Deep vein thrombosis can be very serious because blood clots in your veins can break loose, travel through your bloodstream and lodge in your lungs, blocking blood flow (pulmonary embolism).



Blood clot in leg vein

A blood clot in a leg vein may cause pain, warmth and tenderness in the affected area.

Advertisement

Mayo Clinic does not endorse companies or products. Advertising revenue supports our not-for-profit mission.

Advertising & Sponsorship

[Policy](#) | [Opportunities](#) | [Ad Choices](#)

Mayo Clinic Marketplace

Check out these best-sellers and special offers on books and newsletters from Mayo Clinic.

[NEW – Guide to Fibromyalgia](#)
[Instant access – Mayo Clinic Health Letter](#)
[Diabetes? This diet works ...](#)
[Stop osteoporosis in its tracks](#)
[The Mayo Clinic Diet Online](#)

Products & Services

[Mayo Clinic GeneGuide™](#)

Symptoms

Visited 11/15/2019

Deep vein thrombosis signs and symptoms can include:

Swelling in the affected leg. Rarely, there's swelling in both legs.

- Pain in your leg. The pain often starts in your calf and can feel like cramping or soreness.
- Red or discolored skin on the leg.
- A feeling of warmth in the affected leg.

Deep vein thrombosis can occur without noticeable symptoms.

When to see a doctor

If you develop signs or symptoms of deep vein thrombosis, contact your doctor.

If you develop signs or symptoms of a pulmonary embolism — a life-threatening complication of deep vein thrombosis — seek immediate medical attention.

The warning signs and symptoms of a pulmonary embolism include:

- Sudden shortness of breath
- Chest pain or discomfort that worsens when you take a deep breath or when you cough
- Feeling lightheaded or dizzy, or fainting
- Rapid pulse
- Coughing up blood



[Request an Appointment at Mayo Clinic](#)

Causes

The blood clots of deep vein thrombosis can be caused by anything that prevents your blood from circulating or clotting normally, such as injury to a vein, surgery, certain medications and limited movement.

Risk factors

Visited 11/15/2019

Many factors can increase your risk of developing deep vein thrombosis (DVT). The more you have, the greater your risk of DVT. Risk factors include:

- Visited 11/15/2019
- **Inheriting a blood-clotting disorder.** Some people inherit a disorder that makes their blood clot more easily. This condition on its own might not cause blood clots unless combined with one or more other risk factors.
 - **Prolonged bed rest, such as during a long hospital stay, or paralysis.** When your legs remain still for long periods, your calf muscles don't contract to help blood circulate, which can increase the risk of blood clots.
 - **Injury or surgery.** Injury to your veins or surgery can increase the risk of blood clots.
 - **Pregnancy.** Pregnancy increases the pressure in the veins in your pelvis and legs. Women with an inherited clotting disorder are especially at risk. The risk of blood clots from pregnancy can continue for up to six weeks after you have your baby.
 - **Birth control pills (oral contraceptives) or hormone replacement therapy.** Both can increase your blood's ability to clot.
 - **Being overweight or obese.** Being overweight increases the pressure in the veins in your pelvis and legs.
 - **Smoking.** Smoking affects blood clotting and circulation, which can increase your risk of DVT.
 - **Cancer.** Some forms of cancer increase substances in your blood that cause your blood to clot. Some forms of cancer treatment also increase the risk of blood clots.
 - **Heart failure.** This increases your risk of DVT and pulmonary embolism. Because people with heart failure have limited heart and lung function, the symptoms caused by even a small pulmonary embolism are more noticeable.
 - **Inflammatory bowel disease.** Bowel diseases, such as Crohn's disease or ulcerative colitis, increase the risk of DVT.
 - **A personal or family history of deep vein thrombosis or pulmonary embolism.** If you or someone in your family has had one or both of these, you might be at greater risk of developing a DVT.
 - **Age.** Being older than 60 increases your risk of DVT, though it can occur at any age.
 - **Sitting for long periods of time, such as when driving or flying.** When your legs remain still for hours, your calf muscles don't contract, which normally helps blood circulate. Blood clots can form in the calves of your legs if your calf muscles don't move for long periods.

Complications

A serious complication associated with deep



Deep vein thrombosis - Symptoms and causes - Mayo Clinic

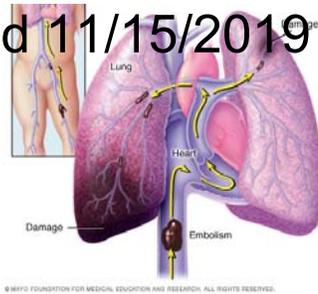
Visited 11/15/2019

Pulmonary embolism

A pulmonary embolism occurs when a blood vessel in your lung becomes blocked by a blood clot (thrombus) that travels to your lung from another part of your body, usually your leg.

A pulmonary embolism can be life-threatening. It's important to watch for signs and symptoms of a pulmonary embolism and seek medical attention if they occur. Signs and symptoms of a pulmonary embolism include:

- Sudden shortness of breath
- Chest pain or discomfort that worsens when you take a deep breath or when you cough
- Feeling lightheaded or dizzy, or fainting
- Rapid pulse
- Coughing up blood



Pulmonary embolism

Pulmonary embolism occurs when a blood clot gets lodged in an artery in the lung, blocking blood flow to part of the lung. Blood clots most often originate in the legs and travel up through the right side of the heart and into the lungs.

Postphlebotic syndrome

A common complication that can occur after deep vein thrombosis is known as postphlebotic syndrome, also called postthrombotic syndrome. Damage to your veins from the blood clot reduces blood flow in the affected areas, which can cause:

- Persistent swelling of your legs (edema)
- Leg pain
- Skin discoloration
- Skin sores

Prevention

Measures to prevent deep vein thrombosis include:

- **Avoid sitting still.** If you have had surgery or have been on bed rest for other reasons, try to get moving as soon as possible. If you're sitting for a while, don't cross your legs, which can hamper blood flow. If you're traveling a long distance by car, stop every hour or so and walk around.

Visited 11/15/2019

If you're on a plane, stand or walk occasionally. If you can't do that, exercise your lower legs. Try raising and lowering your heels while keeping your toes on the floor, then raising your toes with your heels are on the floor.

- **Make lifestyle changes.** Lose weight and quit smoking.
- **Exercise.** Regular exercise lowers your risk of blood clots, which is especially important for people who sit a lot or travel frequently.

The Mayo Clinic experience and patient stories

Our patients tell us that the quality of their interactions, our attention to detail and the efficiency of their visits mean health care like they've never experienced. See the stories of satisfied Mayo Clinic patients.



Reenergized After Accurate Diagnosis and Treatment for Painful, Debilitating Symptoms

Margaret Parry is moving with ease around her Wyoming home and community these days. She has plenty of energy, she's excited about life and she feels good. It's a 180-degree difference from a year ago when an undiagnosed condition made each step she took a painful proposition. As far back as 67-year-old Margaret Parry can [...]

By Mayo Clinic Staff



[Request an Appointment at Mayo Clinic](#)

Diagnosis & treatment >

Share on: [Facebook](#) [Twitter](#) [Print](#) March 06, 2018

[Show references](#) ▾

Related

Visited 11/15/2019

[Warfarin side effects](#)

Associated Procedures

[CT scan](#)

[MRI](#)

[Ultrasound](#)

News from Mayo Clinic

[Mayo Clinic Minute: Ins and outs of blood clot filters](#)

July 18, 2019, 07:00 a.m. CDT

Products & Services

[Mayo Clinic GeneGuide™](#)

Deep vein thrombosis (DVT)

Symptoms & causes

Diagnosis & treatment

Doctors & departments

[Patient Care & Health Information](#) > [Diseases & Conditions](#) > [Deep vein thrombosis](#)

CON-20303972



[Request Appointment](#) | [Contact Us](#)

[About Mayo Clinic](#) | [Employees](#) | [Find a Job](#)

[Site Map](#) | [About This Site](#)



Mayo Clinic is a not-for-profit organization. Make a donation.

Any use of this site constitutes your agreement to the [Terms and Conditions](#) and [Privacy Policy](#) linked below.

[Terms and Conditions](#)

[Privacy Policy](#)

A single copy of these materials may be reprinted for noncommercial personal use only. "Mayo," "Mayo Clinic," "MayoClinic.org," "Mayo Clinic Healthy Living," and the triple-shield Mayo Clinic logo are trademarks of Mayo Foundation for Medical Education and