



Cleveland Clinic

# May-Thurner Syndrome Treatment Guide





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# MAY-THURNER SYNDROME (MTS)

(Also Called 'Iliac Vein Compression Syndrome')

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## What are the symptoms of May-Thurner Syndrome?

Most people do not know they have May-Thurner Syndrome (MTS). It is usually discovered when a patient has a deep vein thrombosis (DVT). Symptoms of MTS can include:

- A feeling of heaviness or fullness in only the left leg during exercise or activity
- Varicose veins in only the left leg, especially if they recur
- Venous stasis ulcers (a type of leg ulcer) without a DVT

You should see your doctor if you have any of the above symptoms, or if your legs are swollen, painful, tender, red or discolored, feel warmer than usual, or if you have enlarged leg veins.

## Are DVTs dangerous?

A DVT itself is not life-threatening. However, the blood clot can break free, travel through the bloodstream and become lodged in the blood vessels of the lung. This is called a pulmonary embolism, and it can be a life-threatening condition.

A DVT can also lead to chronic venous insufficiency (also known as post-thrombotic syndrome). This is a condition involving the legs that includes pooling of blood, chronic leg swelling, increased pressure, increased pigmentation or discoloration of the skin, and venous stasis ulcers.

## What is May-Thurner Syndrome (MTS), also known as Iliac Vein Compression Syndrome?

May-Thurner syndrome (MTS) occurs when the left iliac vein is compressed by the right iliac artery. This increases the risk of deep vein thrombosis (DVT). A DVT is a blood clot that may partially or completely block blood flow through the vein.

## What are the treatment options for patients with MTS?

Most treatments involve treating the DVT that is associated with the vein compression. There are several treatment options available. These include anticoagulation, catheter-directed thrombolytic therapy, angioplasty and stenting, and vena cava filters. The goals of treatment are to reduce the symptoms and risk of complications.

Your healthcare provider will recommend the treatment option that is right for you. It is important that you talk to your healthcare provider about all your options before you choose a treatment plan. Make sure you understand the potential benefits, risks and side effects of each option. Once you decide on a treatment, you will receive information about how to prepare. You will also receive instructions for your recovery.

*This information is not intended to replace the medical advice of your doctor or healthcare provider. Please consult your healthcare provider for advice about a specific medical condition.*

## Anticoagulation

Anticoagulation therapy involves taking blood-thinning medication to prevent blood clots. If you start this treatment, you will be closely monitored to make sure you don't have any complications from the medication. You may be referred to Cleveland Clinic's Anticoagulation Clinic for medication management and monitoring.

## Catheter-directed thrombolytic therapy

Catheter-directed thrombolytic therapy is a nonsurgical treatment that dissolves blood clots with medications. These medications are called thrombolytics. A catheter (long, slender tube) is guided through your vein to the area where the blood clot is located. The clot-dissolving drug is sent through the catheter into the clot. The clot usually dissolves in a matter of hours to a few days. You may also need angioplasty and/or a stent to open the narrowed area of the vein and prevent further clots from forming.

## Angioplasty and stenting

Angioplasty is a nonsurgical treatment option used to widen the vein after a blood clot has been dissolved. A small balloon at the tip of the catheter is inflated to stretch the vein open. This increases blood flow. A stent is often placed in the vein during angioplasty. A stent is a small, metal mesh tube that supports the inside of the vein and keeps it open. The stent is put in place using the catheter and guide wire. Once the stent is in the narrowed area, the balloon is inflated and the stent is expanded to the size of the vein. The balloon is deflated and removed, and the stent permanently stays in place.

Patients with MTS often have a stent placed in their iliac vein. Once the blood clot is removed from the vein (typically by thrombolysis), the compressed vein is forced open with a stent.

## Vena cava filters

Vena cava filters may be a treatment option for some patients who cannot take anticoagulant (blood-thinning) medications. These include heparin, low-molecular weight heparin and fondaparinux. This therapy may also benefit patients who continue to develop blood clots while taking an anticoagulant.

The filter is put in place using a catheter. The catheter is inserted into the vena cava (largest vein in the body) through an incision in the groin or neck.

Vena cava filters are not always used to treat patients with MTS, but are often used in patients who have complications related to a DVT. The filter can catch any blood clots that move through the body towards the lungs. This prevents a pulmonary embolism, but does not keep more clots from forming.

## What outcomes can I expect from treatment?

In general, outcomes for patients treated for MTS are very good. Early detection of the DVT improves the ability to receive adequate treatment and complete relief from symptoms. If you have any questions, please ask your healthcare provider.

## For More Information

For more information about May-Thurner syndrome and treatment options, please visit our website at [my.clevelandclinic.org/disorders/vascular\\_abnormalities/vs\\_may-thurner\\_syndrome.aspx](http://my.clevelandclinic.org/disorders/vascular_abnormalities/vs_may-thurner_syndrome.aspx) or e-mail us using the Contact Us form.

To talk with a nurse about valve disease and available treatment options, please contact the Sydell and Arnold Miller Heart & Vascular Institute Resource Center Nurse toll-free at **866.289.6911**.

## About the Sydell and Arnold Miller Family Heart & Vascular Institute

The Sydell and Arnold Miller Family Heart & Vascular Institute at Cleveland Clinic is one of the largest cardiovascular specialty groups in the world, providing patients with expert medical management and a full range of therapies. **Our cardiac care program has been ranked number one since 1995** by *U.S. News & World Report*.

Our areas of expertise combine research, education and clinical practice to provide innovative and scientifically-based treatments for cardiovascular disease. The commitment of our physicians and scientists to the prevention and cure of cardiovascular disease has led to innovative care, better outcomes and improved quality of life for patients with cardiovascular disease.

## To Make an Appointment

To make an appointment, please call **800.223.2273** or **216.444.6697**

International patients, please call Global Patient Services at **001.216.444.8184** to make an appointment, or visit us on the Web at [www.clevelandclinic.org/appointments](http://www.clevelandclinic.org/appointments).



**Every life deserves world class care.**

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The Sydell and Arnold Miller Family Heart & Vascular Institute is one of the largest cardiovascular and thoracic specialty groups in the world. Experts provide the latest in medical and surgical care, all enhanced by advanced technology, research and education. It is ranked No. 1 in America for heart care, year after year. The Heart & Vascular Institute is one of 27 institutes at Cleveland Clinic, a nonprofit academic medical center ranked among the nation's top hospitals (*U.S. News & World Report*). More than 3,000 physicians and researchers in 120 specialties collaborate to give every patient the best outcome and experience.  
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