



## May-Thurner Syndrome

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

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

### **When should I seek treatment for 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

Even though DVT itself is not life-threatening, the blood clot has the potential to break free and travel through the bloodstream, where it can become lodged in the blood vessels of the lung (known as a pulmonary embolism). This can be a life-threatening condition.

DVT can also lead to complications in the legs referred to as chronic venous insufficiency (also known as post-thrombotic syndrome). This condition is characterized by pooling of blood, chronic leg swelling, increased pressure, increased pigmentation or discoloration of the skin, and leg ulcers known as venous stasis ulcer.

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.

## **TREATMENTS**

### **What are the treatment options for patients with May-Thurner Syndrome (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.

### **Anticoagulation**

Anticoagulation therapy involves taking bloodthinning 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 e.g. Coumadin (Warfarin), Xarelto, Eliquis, and Pradaxa.

### **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.