

A very rare case of venous thromboembolism May-Thurner Syndrome

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Objectives

- Clinicians should have a high index of suspicion for MTS in the presence of unprovoked DVT in the left lower extremity, recurrent left sided DVT and/or signs of chronic venous hypertension.
- Angioplasty and stenting of the affected lesion and subsequent antiplatelet therapy is the definitive treatment for MTS.
- Evaluation for May-Thurner Syndrome should be considered in patients presenting with an unexplained cause of VTE, as diagnosis can influence the duration of anticoagulation therapy.

A 65-year-old African American gentleman with past medical history of hypertension and coronary artery disease presented with left lower extremity pain and swelling of the leg for five days. He had no history of leg trauma, recent surgery, bed rest, travel, malignancy, previous clotting episodes or family history of hypercoagulable disorders. Patient regularly ambulates. He is a lifetime non-smoker and does not take any medication. His left lower extremity was swollen from the calf down to the ankle and foot, tense, erythematous and tender to palpation. Dorsalis pedis and posterior tibial pulses were weakly palpable. Homan's sign was appreciated while the rest of the physical exam was unremarkable. Duplex ultrasound of the left lower extremity showed thrombi in the left popliteal, posterior tibial and peroneal veins. CT abdomen and pelvis with IV contrast demonstrated significant compression of the left common iliac vein as it crosses posterior to the left internal iliac artery, consistent with May-Thurner Syndrome (MTS). Spiral chest CT was significant for subsegmental emboli in the bilateral lobe pulmonary arteries. Patient was started on anticoagulation, then he was referred to an advanced vascular center to consider the need for angioplasty and stenting and for possible thrombolysis.

May-Thurner Syndrome (MTS) was first described in 1908 by Virchow, who observed that iliofemoral vein thrombosis was five times more likely to occur in the left leg than in the right leg. May and Thurner discovered an anatomical variant where the right iliac artery compressed the left iliac vein against the fifth lumbar vertebra. Clinicians should have a high index of suspicion for MTS in the presence of unprovoked DVT in the left

lower extremity and/or signs of chronic venous hypertension. Angioplasty and stenting of the affected lesion is the definitive treatment for MTS, while anticoagulation management is similar to patients with provoked VTE. Therefore, it can be argued that in patients with an unexplained cause of VTE, investigation for MTS if clinically suspected can impact management decisions.