AN UNUSUAL CASE OF EXTENSIVE DEEP VENOUS THROMBOSIS
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Introduction: Deep venous thrombosis (DVT) is a common clinical problem in daily practice. About half of the cases are idiopathic and require anticoagulants for various durations. The other half has underlying causes that might be reversible. The common ones are immobility, cancer, trauma and surgery. Herein, we describe an unusual cause of extensive DVT.

Objectives: A 46-year-old Caucasian woman with a ten-year history of endometrial cancer status post total abdominal hysterectomy and bilateral salpingo-oophorectomy who presented with two-day history of left leg pain and swelling. She denied a recent surgery, immobility, vaginal bleeding and oral contraceptive use. Physical examination revealed tachycardia with normal blood pressure and oxygen saturation. Her entire left leg from the thigh to lower calf appeared markedly swollen, warm and erythematosus to purplish. Dorsalis pedis and posterior tibial arterial pulses were palpable. Findings are classic for phlegmasia ceruleadolens. Right leg was normal. Venous duplex ultrasonography of the left showed dilated, loss of compressibility of the left common femoral vein as well as left popliteal vein with intraluminal echogenic materials. Thrombophilia workup including factor V Leiden mutation, antithrombin III deficiency, protein C deficiency and protein S deficiency were negative. CT scan of the abdomen was performed to further evaluate the left iliac vein, which was not adequately assessed by the ultrasonography, and also for any evidences of recurrent endometrial cancer with possible compression of adjacent vascular structures. It showed absence of the left common iliac vein with increased collateral veins in the presacral region suggesting chronic thrombosis of the left common iliac vein. It also revealed a right iliac artery in the position of the left common iliac vein suggesting compression of the left common iliac vein to the vertebral body posteriorly diagnostic of the left iliac vein compression syndrome or the May-Thurner syndrome. Venography showed occlusive thrombus in a left common iliac vein extending to the left external iliac vein and the left common femoral vein. The patient was anticoagulated with heparin and warfarin. Inferior vena cava filter was placed and catheter-directed thrombolysis with venous angioplasty and intravascular stenting of the left iliac vein were successful. She had substantial improvement of her left leg pain and swelling during the next few days. She was discharged with warfarin and bridging heparin. At one year follow up, warfarin was discontinued. She has not had any further episodes of DVT as of her most recent follow up at 1 year after the stenting.

Methods: none

Results: Left iliac vein compression syndrome or May-Thurner syndrome is a DVT of left common iliac vein resulting from chronic compression of the vein against a vertebra posteriorly by the overlying right common iliac artery. The prevalence of “spurs” in the left common iliac vein, which is likely resulting from chronic compression, is 22% from the autopsies. However, some of the patients with “spurs” do not have DVT. Even a more than 50% narrowing of the left iliac vein is associated with only about 75% of patients with DVT. Treatment with catheter-directed thrombolysis, venous angioplasty and intravascular stenting of the left iliac vein along with anticoagulation are very effective in preventing further episodes of DVT. IVC filter is believed to prevent pulmonary embolism during angioplasty.