

## IMAGES IN EMERGENCY MEDICINE

## Imaging

## Elderly woman with swollen leg

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**FIGURE 1** The patient's left leg was remarkably swollen compared with her right leg with blue discoloration

An 82-year-old woman presented with a swollen left leg. She was well until 7 days before, but over several days, she had noticed her left leg becoming swollen and blue. She denied leg pain, abdominal pain, chest pain, dyspnea, palpitation, or cough. She also denied any history of recent immobilization, hormonal therapy, past smoking, malignancy, cardiovascular disorders, or hematologic disorders. On presentation, her vital signs were stable. On inspection, her left leg was remarkably swollen compared with her right leg (48.5 cm and 34.2 cm at 10 cm above the knees, respectively) with blue discoloration (Figure 1). She denied pain and any tenderness when grasped by her calves. Her dorsalis pedis pulses were palpable bilaterally. A femoral vein compression ultrasonography, performed by the internist seeing the patient at the bedside, detected non-compressibility of the proximal veins. A Doppler ultrasound showed that there was occlusion of the left femoral vein. Computed tomography scan with contrast showed venous thrombus



**FIGURE 2** Computed tomography scan with contrast showed venous thrombus occluding the common iliac vein

occluding the common iliac vein (Figure 2; thrombus [Arrow]). No pulmonary embolus was detected. She was admitted to the hospital and started on treatment with intravenous heparin.

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Femoral vein thrombosis is a potentially life-threatening condition that can cause saddle pulmonary embolus resulting in total occlusion of the main pulmonary artery,<sup>1</sup> which was not seen in this case. Combined compression and color Doppler ultrasound techniques for proximal deep venous thrombosis have optimal sensitivity and specificity (96.5% and 94.0%, respectively).<sup>2</sup> Femoral circumference difference between legs and blue discoloration of the entire leg can also be speculated as useful indicators of the diagnosis of femoral deep venous thrombosis. Further studies estimating the diagnostic accuracy of this information in conjunction with combined compression and color Doppler ultrasound will be expected to show a higher sensitivity and specificity in the diagnosis of femoral deep venous thrombosis.

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