

IMAGES IN EMERGENCY MEDICINE

Nontrauma and Medical

Man with leg pain**Donald Byars MD¹ | Jondavid Landon MD¹  | Megan Spurrell MD²**¹Department of Emergency Medicine, Eastern Virginia Medical School, Norfolk, Virginia, USA²Emergency Medicine Residency Program, Eastern Virginia Medical School, Norfolk, Virginia, USA**Correspondence**

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Email: jondavid.landon@gmail.com**1 | PATIENT PRESENTATION**

A 66-year-old-male with a history of type 2 diabetes and hypertension presented as a transfer for rapid progression of lower extremity pain, swelling, and blue-purple discoloration of the entire limb (Figure 1) with concern for a possible necrotizing infection. His symptoms began earlier in the day and progressed over just a few hours. He had no known thromboembolic risk factors. Initial vital signs were notable only for a heart rate of 115.

Point-of-care ultrasound revealed extensive deep venous thrombosis burden confirmed by formal duplex sonography. The patient was admitted on a heparin infusion and underwent EKOS™ catheter directed tissue plasminogen therapy with stent placement. He was admitted for 5 days and successfully discharged on oral anticoagulation back to his baseline level of function.

2 | DIAGNOSIS*Phlegmasia cerulea dolens*

Phlegmasia cerulea dolens (PCD) is a rare ischemic complication of massive venous thromboembolism with high rates of morbidity and mortality. Patients present with limb edema, pain, and cyanosis that can quickly develop into compartment syndrome, limb ischemia, and venous gangrene with amputation and death rates as high as 50% and 40%, respectively.¹ PCD tends to affect the iliofemoral segment of the lower extremities.² Non-traumatic cases of PCD are most commonly associated with malignancy.³ The preferred imaging modality is Doppler ultrasound and use of point-of-care ultrasound by physicians can expedite treatment of PCD.⁴ Management includes



FIGURE 1 Right lower limb with swelling, blotchy blue and purple discoloration, and pain consistent with phlegmasia cerulea dolens.

limb elevation, intravenous fluids, and either systemic anticoagulation, catheter-directed thrombolysis, thrombectomy, or a combination of these definitive therapies.⁵

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