Images in Emergency Medicine: Phlegmasia Cerulea Dolens

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Phlegmasia cerulea dolens (PCD) is a rare form of massive venous thrombosis of the lower extremities associated with a high degree of morbidity including venous gangrene, compartment syndrome, and arterial compromise.1 Risk factors for PCD include malignancy, immobility, heart failure, heparin-induced thrombocytopenia, prothrombin states (eg, antiphospholipid syndrome), pregnancy, surgery and venous instrumentation (eg, placement of central venous catheters and inferior vena cava filters).2 Clinically, PCD is characterized by sudden pain, swelling, purple ecchymosis, and arterial ischemia with loss of distal pulses.3 Edema develops rapidly, and the skin of the affected extremity is usually tense, firm, and tender to palpation. Doppler ultrasound of the affected extremity should be used to confirm the diagnosis of PCD, and initial treatment includes bed rest, elevation of the affected limb, systemic anticoagulation with heparin.2 Catheter-directed thrombolysis and venous thrombectomy should also be considered as early treatment options for PCD.4

References

Figure 1. Lower extremities of a 70-year-old man presenting with a sudden onset of a swollen, violaceous, and painful left leg, consistent with phlegmasia cerulea dolens.

Figure 2. Left lower extremity venous ultrasound image from same patient demonstrating left common femoral vein without compression (left panel, arrow) and with noncompressible clot (right panel, arrow).

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