

Phlegmasia Cerulae Dolens: A case report

Poster
No 32

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Introduction

Phlegmasia (/flɛg-mā'zhə/: inflammation) cerulean (/sɪ'ru:lɪən/: blue) dolens (/doleō/: pain) is a rare, potential limb-threatening complication of acute deep vein thrombosis characterized by marked swelling of the extremities with pain and cyanosis, which may progress to gangrene with high amputation and mortality rates. PCD is part of a clinical spectrum that ranges from phlegmasia alba dolens to venous gangrene.

Case report

An 80 years old lady was brought to the emergency room for chest pain and difficulty breathing. The patient also complained of right-sided body weakness, which had led her to be bedridden for the past ten days. Local examinations reveal a tender, diffusely swollen right leg with petechia and bluish discoloration. The distal arterial pulses, however, are preserved with normal capillary refills time.

Bedside ultrasound shows extensive thrombosis involving the right common femoral to the right popliteal vein with deep saphenous vein extension proximally. Doppler shows an absence of blood flows within the vessel.

The patient was admitted and started on unfractionated heparin infusion. She was concurrently treated for cerebrovascular accident, aspiration pneumonia, and non-ST elevation myocardial ischemia.

The patient demonstrated good clinical improvement and was discharged after ten days of admission with dual antiplatelet and apixaban.



Figure 1: Cyanotic, painful, and marked oedematous right leg, compared to the normal left leg.

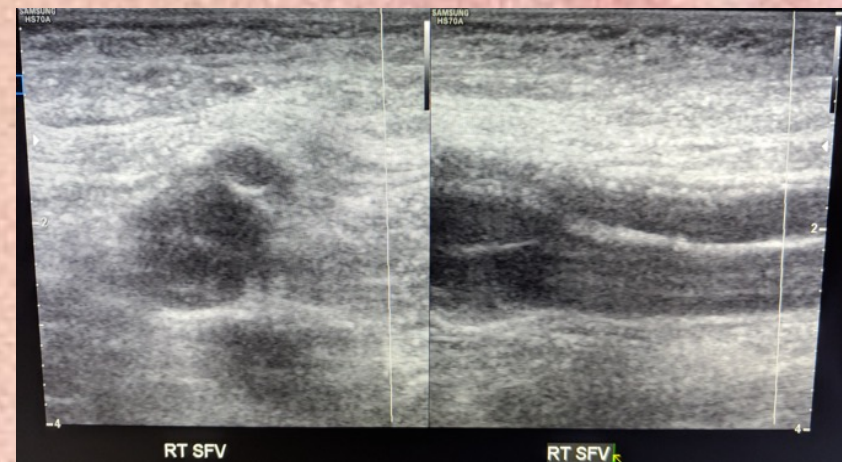
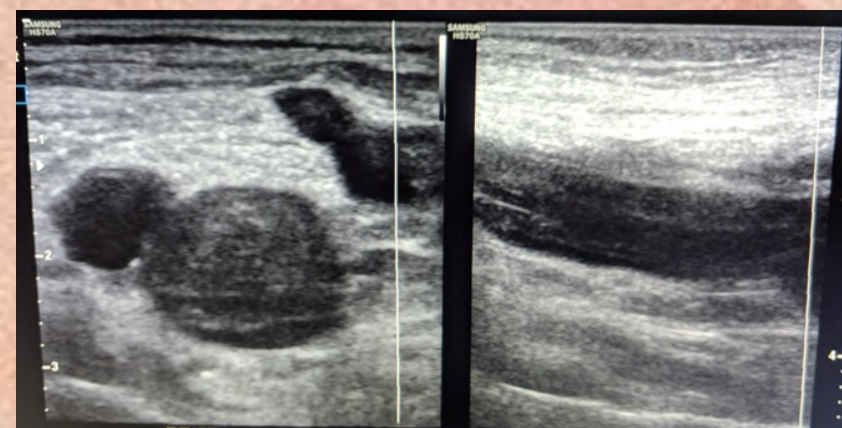


Figure 2: Ultrasound shows extensive echogenic thrombus within the distended and non-compressible vein.

A: Right common femoral vein.

B: Right superficial femoral vein.

C: Right popliteal vein.

Discussion

Clinical manifestations of PCD may be gradual or fulminant. Most cases are preceded by oedema, pain, and blanching without cyanosis. Diagnosis can be made on clinical grounds or by Doppler ultrasound, which the latter has the advantage of identifying and determining the extent of occlusion in both the arteries and the veins.

The goals of treatment are thrombus removal to improve venous patency, valve function and decrease the risk of recurrence and post-thrombotic syndrome. The immediate first-line treatment is limb elevation to an angle greater than 60 degrees above the heart level to prevent venous stasis and increase venous return. In PCD without signs of ischemia or gangrene, a systemic anticoagulant such as unfractionated heparin is recommended. However, if there is any sign of arterial compromise, urgent referral to the interventional radiologist and vascular surgeon for thrombolysis or thrombectomy (surgical or catheter-directed) is required to salvage the limb.

The major amputation rate is 20–50%, and the mortality rate is 25–40%.

Reference

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