

POCUS SAVED LIMB IN CASE PARADOXICAL EMBOLI

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Case Presentation: A 60 yr old male presented to ED with complaints of atraumatic acute right sided leg weakness with pain. Symptoms started approximately 2 hours ago. Clinical exam revealed acutely pulseless cold right limb. Power of the limb was 2/5 for all major joints compared to the left leg. There was no local swelling. No other neurology was identified.

Management and Outcome: Point of care ultrasound of femoral vessels was done to look for Doppler signals. It revealed bilateral deep vein thrombosis (DVT) on compression test and no flow in the right superficial femoral artery. **Diagnosis of acute ischemic limb – Rutherford classification IIb, with associated venous thrombosis was made.**

CT angiogram showed:-

Acute occlusion of the right superficial femoral artery, profunda femoris and popliteal artery with a single vessel run off below the right knee. Acute thrombus within the proximal coeliac artery, splenic artery and superior mesenteric artery. Bilateral pulmonary emboli and bilateral lower limb DVT's. Patient underwent emergency right common femoral embolectomy the same day and was anticoagulated with heparin infusion, which was later switched to rivaroxaban.

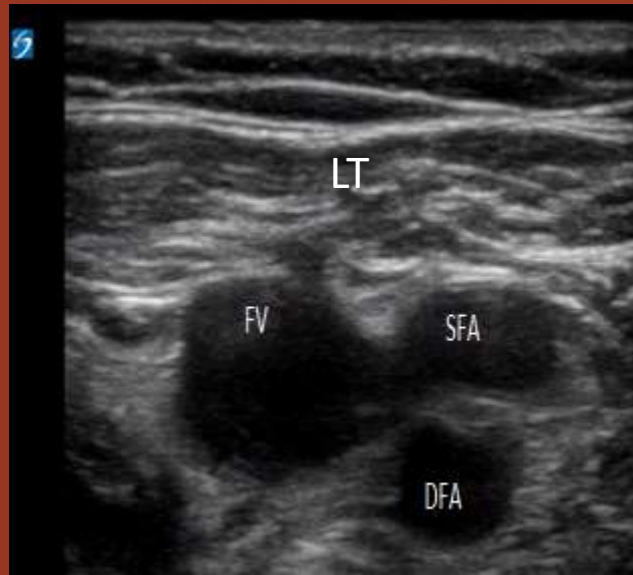
ECHO showed intact interventricular septum.

Speculative diagnosis of extra cardiac vascular communication as a cause of paradoxical embolism was made.

Right femoral vessel scan image showing clot burden in both artery and vein. DVT compression test was positive.



Left femoral vessel scan image which was positive for DVT on compression test.



Key learning points:

Early POCUS evaluation of this patient, within 15 minutes of consult by ED physician lead to speedy decision making, ordering of appropriate investigations and timely escalation to vascular surgery.

It was a time critical diagnosis which could have progressed to irreversible damage to ischemic limb, with a potential above knee amputation, had it not been acted upon emergently.