

INTRODUCTION

- Phlegmasia cerulea dolens (PCD) is a rare but devastating complication of deep venous thrombosis (DVT).
- Extensive venous thrombosis in PCD, leads to arterial insufficiency and subsequent limb ischemia and gangrene.

Case Presentation

- 47-year-old female presented with acute dyspnea for one day. She was afebrile, normotensive, tachycardic, and tachypneic, with oxygen saturation around 60% on admission.
- CXR revealed multiple bilateral air space disease. CTA was negative for PE but showed extensive bilateral consolidation compatible with multifocal pneumonia.
- Covid test was positive, and she was found to be in ARDS.
- She required 5 days of invasive ventilation in ICU and eventually transferred to floor on nasal cannula and later room air.
- An ABG while in ICU had resulted in a hematoma of Right upper extremity (RUE). Ultrasound and CTA of RUE showed patent right radial, ulnar arteries and palmar arch. She also had a midline on her right arm which was removed once transferred to floor.
- Within a few days of transfer, it was noticed she had worsening edema, blisters, mottling and eschars from right hand to mid-forearm, concerning for PCD.



Figure 1: RUE showing blisters, eczema and edema after ICU admission.



Figure 2: CTA showing large bilateral distal main pulmonary artery emboli

Hospital Course

- Venous ultrasound showed acute DVT in the right axillary, brachial veins and superficial thrombus in the right basilic vein.
- Patient was started on Eliquis, however within a day patient became hypoxemic, tachycardic, was noted to have RBBB and S1Q3T3 on EKG. Troponin was elevated to 4700 ng/L, BNP elevated to 368 pg/ml. TTE revealed McConnell sign. CTA showed large acute pulmonary emboli in the distal main pulmonary arteries.
- She was readmitted to the ICU with obstructive shock. AC was changed from Eliquis to heparin drip and she underwent successful suction embolectomy. RUE ulcer, edema and cyanosis continued to improve on AC without percutaneous thrombectomy.

Conclusion

- Peripheral DVT leading to PCD and subsequent compartment syndrome is fatal. Treatment of PCD is by catheter directed thrombolysis via the occluded end and fasciotomy.
- Our patient had non classical presentation in upper extremity (LE being common) and improvement with oral AC, without mechanical thrombectomy. Due to high prevalence of DVT despite therapeutic or prophylactic AC in COVID, early intervention would be the best option in PCD.

References

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