

A RARE ENTITY OF VENOUS THROMBOEMBOLISM: A CASE REPORT OF PHLEGMASIA CERULEA DOLENS

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Introduction

Phlegmasia cerulea dolens (PCD) is the life and limb-threatening sequelae of deep vein thrombosis (DVT), which is complicated by venous congestion and compartment syndrome, leading to arterial occlusion of the involved limb. It is a rare condition with high mortality rate.

Case Report

A 78-year-old Malay lady with underlying diabetes mellitus and hypertension presented to the emergency department with left lower limb swelling and pain for three days. There was no history of trauma, shortness of breath, or risk factors for thromboembolism. On examination, she was alert, comfortable, and not tachypneic. Her vital signs were normal. Examinations revealed diffuse and tender swelling over the whole left lower limb. The limb was cold with absent of the distal pulses, and the skin was mottled. Other systemic examinations were unremarkable. Point-of-care two-point compressions ultrasonography of left lower limb showed the presence of a thrombus within the left femoral and popliteal vein. The diagnosis of PCD was made clinically, and the unfractionated heparin infusion was initiated. Urgent CT angiogram/venogram revealed massive DVT extending from the left common iliac vein distally to all major periphery veins and atherosclerotic disease of the arteries with intermittent stenosis of the profundus femoris, extending to the distal arteries of the involved limb. Supportive management was continued in the ward. During admission, her condition deteriorated. She was intubated due to respiratory failure and supported with noradrenaline. CT pulmonary angiogram showed no pulmonary embolism. She succumbed to hospital-acquired pneumonia after two weeks of admission.

Discussion

PCD is the extreme manifestation of extensive DVT with evidence of acute limb ischemia. Timely diagnosis of PCD by constellation of signs and symptoms is crucial for initial

management, including administration of intravenous heparin, elevation of the involved limb, fluid resuscitation, and pain management. A CT angiogram/venogram can confirm the diagnosis and severity of vascular occlusion. Other therapeutic interventions includes catheter-directed thrombolysis and thrombectomy. PCD carries a poor prognosis, and if gangrene presents, the mortality will increase from 20% to 40%.

Conclusion

A unilateral swollen, painful limb, complicated by signs of acute limb ischaemia, should ring the bell of the diagnosis of PCD. Early clinical recognition of this condition and supportive treatment would prevent further complications and reduce mortality risk.

Keyword: Phlegmasia cerulea dolens, deep vein thrombosis, venous thromboembolism, limb ischaemia