Acute limb ischemia in COVID-19 patient; A rare complication and early recognition salvage limb

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Introduction

The incidence of for systemic hypercoagulability and thromboembolism in COVID-19 patients have gained substantial interest. Several studies have demonstrated hypercoagulability state in patients with COVID-19 and its negative impact on mortality rates. In Italy, a single-centre study discovered an increase of acute limb ischemia cases in 2020 (during COVID-19 pandemic) in comparison to 2019 (prior to COVID-19 pandemic). This case report addressed a patient with a chief complaint of pain in the lower extremity, later diagnosed with acute limb injury (ALI) in COVID-19 patients.

Case description

A 42-year-old lady with an insignificant past medical history presented with ALI eight days after an initial diagnosis of COVID-19. She was diagnosed with mild COVID-19 infection, category 2. She was immediately started on unfractionated heparin infusion when ischemic symptoms developed. A surgical thrombectomy was performed, a 15cm long clot was successfully removed. She was discharged home well on postoperative day eight and the right lower limb was totally relieved from pain and ischemia.

IMAGES



Figure 1. (A) Pallor plantar surface of right foot.(B) Pallor right big toe. On presentation day to ED

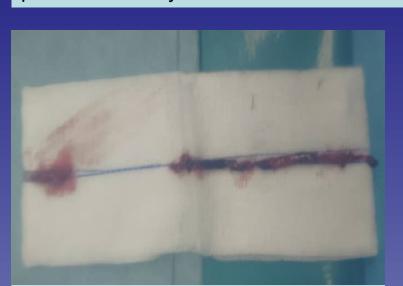


Figure 2. Successfully removed 15cm long clot



Figure 3. (A) Pre-embolectomy. (B) Day 1 Post-embolectomy

Discussion

Coagulation abnormalities leading to arterial and venous thromboses is increasingly being associated with COVID-19 infection. With early recognition and prompt management with thrombolytics and interventions to provide early revascularization, the limb is salvageable in majority of the cases. However, if treatment is delayed, ALI is associated with a high possibility of amputation.

Conclusion

In conclusion, we report a category 2 (mild) COVID-19 patient who developed acute right lower limb ischemia. Our case shows that healthcare workers must have high index of suspicion on life-threatening symptoms linked to COVID-19 patients, even if they are in mild categories, in order to begin effective and safe intervention as soon as possible.

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