COVID-19 coagulopathy

To the Editor: I read with keen interest the article "Coagulopathy in COVID-19: Manifestations and management" in the August issue.[1] While I agree with the need for prophylaxis against venous thromboembolism (VTE) in patients admitted with COVID-19 and the need for therapeutic anticoagulation for confirmed VTE, I am skeptical of high-intensity prophylaxis for patients with D-dimer levels of 3.0 µg/mL or higher.

The American College of Chest Physicians, in their updated guidelines on prevention, diagnosis, and treatment of VTE in patients with COVID-19,[2] state, "In critically ill patients with COVID-19, we suggest current standard dose anticoagulant thromboprophylaxis over intermediate ([low-molecular-weight heparin twice a day] or increased weight-based dosing) or full treatment dosing, per existing guidelines."

Also, Al-Samkari et al[3] performed a retrospective analysis of 400 COVID-19 patients managed with prophylactic anticoagulation, in whom the rate of radiographically confirmed VTE was 4.8% and the overall bleeding rate was 4.8%. In 144 critically ill patients, the rate of radiographically confirmed VTE was 7.6%, and the bleeding rate was 5.6%. Elevated D-dimer levels predicted bleeding as well as thrombotic complications, suggesting one should exercise caution in using the higher VTE prophylaxis dose.

Randomized clinical trials are needed to determine the optimal dose and course of thromboprophylaxis in patients with COVID-19.

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