



Poll Results: COVID-19 Hypercoagulable Complications

May 29, 2020 | George W. Vetrovec, MD, MACC

Poll

Quick Takes

In patients with COVID-19,

- baseline coagulation profiles are often abnormal;
- thrombotic events appear common, of which pulmonary emboli appear most common; and
- prophylactic anticoagulants may reduce the risk of thrombotic events, but decisions should be individualized to minimize bleeding complications.

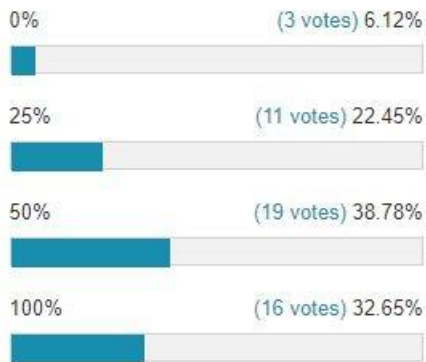
The medical world's understanding of COVID-19 is constantly evolving. This poll was initiated amid the realization that the frequently reported abnormal coagulation profiles of patients with COVID-19 clearly translate into a significant risk for clinical thrombotic events manifested as strokes (often in young persons), peripheral vascular occlusions, deep vein thrombosis, and pulmonary embolus (traditional embolic as well as frequent *in situ* micro emboli).^{1,2} The consequence has been a growing belief that patients with COVID-19 without specific risk of bleeding complications should receive guideline-recommended intravenous, oral, or subcutaneous antithrombotic prophylaxis.

The poll respondents appear to have gotten it right regarding recognizing the

reported frequency of thrombotic events and the need for prophylaxis. Only 6% of respondents did not use prophylaxis at all. The remainder did use in 25% or more of patients with COVID-19, with 70% treating 50% or more of their patients. In a recent publication, Paranjpe et al.³ reported significantly reduced mortality for ventilated patients with COVID-19 on anticoagulants (29.1%) versus 62.7% for those not receiving anticoagulation. Bleeding events were not significantly higher for the anticoagulated patients. The authors note more data, ideally randomized, are needed to affirm these findings.

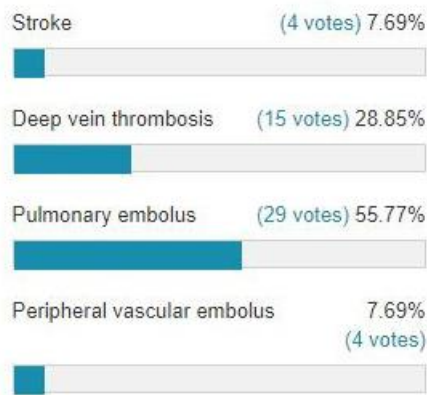
In summary, baseline coagulation profiles are often abnormal, likely contributing to the frequency of thrombotic events in patients with COVID-19. Prophylactic anticoagulants may reduce the risk of thrombotic events, but decisions should be individualized to minimize bleeding complications.

1. What percentage of your COVID-19-positive patients are you treating with guideline-directed antithrombotic therapy (assuming no contraindications)?



Total Votes: 49

2. What is the most common diagnosis for your COVID-19-positive patients who have thrombotic complications?



Total Votes: 52

References

- Oxley TJ, Mocco J, Majidi S, et al. Large-Vessel Stroke as a Presenting Feature of Covid-19 in the Young. *N Engl J Med* 2020;382:e60.
- Lax SF, Skok K, Zechner P, et al. Pulmonary Arterial Thrombosis in COVID-19 With Fatal Outcome: Results From a Prospective, Single-Center, Clinicopathologic Case Series. *Ann Intern Med* 2020;May 14:[Epub ahead

of print].

Paranjpe I, Fuster V, Lala A, et al. Association of Treatment Dose Anticoagulation With In-Hospital Survival Among Hospitalized Patients With COVID-19. *J Am Coll Cardiol* 2020;May 5:[Epub ahead of print].

Share via: [f](#) [t](#) [in](#) [e](#) [+](#)

Clinical Topics: Anticoagulation Management, Invasive Cardiovascular Angiography and Intervention, Noninvasive Imaging, Vascular Medicine, Interventions and Imaging, Interventions and Vascular Medicine, Angiography, Nuclear Imaging

Keywords: *Coronary Angiography, COVID-19, Coronavirus, Coronavirus Infections, severe acute respiratory syndrome coronavirus 2, Anticoagulants, Fibrinolytic Agents, Respiration, Artificial, Venous Thrombosis, Pulmonary Embolism, Thrombosis, Hemorrhage, Stroke*

© 2020 American College of Cardiology Foundation. All rights reserved.