Blood clotting problems in critically ill COVID-19 patients

New research approach links blood clotting measurements with actual patient outcomes

**The problem**

COVID-19 patients whose bodies do not break down blood clots most often require hemodialysis and have a higher rate of clots in the veins. Therefore, critically ill patients are at high risk for developing

- blood clots
- kidney failure
- other vascular complications (i.e., stroke)

**Research approach**

Researchers evaluated at-risk patients with a combination of 2 blood assays

1. **Thromboelastography (TEG)** ▶️ to provide a broad picture of how blood forms clots
2. **Conventional coagulation assay that includes D-dimer levels** ▶️ to detect a protein fragment produced when a blood clot dissolves

**STUDY**

44 patients treated for COVID-19 infection at a single institution

**RESULTS**

Patients identified by TEG assays with no clot breakdown after 30 minutes + a high D-dimer level (>2600 ng/mL)

80% were placed on dialysis

Patients with neither test finding

14% no dialysis

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