

Frequency of lupus anticoagulant in COVID-19 patients

To the Editor

We have recently published in the *Journal of Thrombosis and Haemostasis* the presence of lupus anticoagulant (LAC) at high frequency in COVID-19 patients (Harzallah et al¹). Bowles et al² and Helms et al³ have confirmed these results in new publications. Tang⁴ has reported discordant data. He has found that very few tested COVID-19 patients had positive LAC in a small series (n = 12). Bowles et al have found that LAC was positive in 91% of patients (n = 34) with high activated partial thromboplastin time (aPTT). We and Helms et al have found similar results with, respectively, 45% (n = 56) in severely ill patients and 87.7% (n = 57) in intensive care unit patients. This discrepancy could be due to selected patients: high aPTT was the criteria of inclusion in the study of Bowles et al; the series of Helms et al included intensive care unit patients; and, finally, mainly critically ill patients in the Harzallah et al series.




Tang has suspected the interference of heparin on LAC analysis that might lead to false positive detection of LAC. However, Bowles et al have noted that the dilute Russell's viper venom time (DRVVT) assay contains heparinase, which neutralizes any heparin effect. Helms et al signaled that heparin-neutralizing agent is contained in DRVVT reagents, quenching heparin up to 0.8 U/mL. The LAC analysis has been performed in our series, as recommended by the International Society on Thrombosis and Haemostasis.⁵ DRVVT tests using Hemosil DRVVT screen/confirm (Werfen) have been used and in negative DRVVT tests, sensitive aPTT based assays using Hemosil silica clotting time (SCT) screen/confirm (Werfen) have been done. Heparin interference up to 1 U/mL is neutralized by polybrene in DRVVT reagent. We have determined heparin activity in all cases. In any case, we did not consider LAC positive when heparin activity was higher than 0.5 U/mL with the DRVVT test and 0.05 U/mL with the SCT test. With these series (1, 2, 3) we can affirm that LAC is frequent in COVID-19 patients. However, the relation between the presence of LAC and thrombosis must be studied.

CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

AUTHOR CONTRIBUTIONS

I. Harzallah wrote the manuscript and B. Drénou and A. Debliquis revised the manuscript.

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