

**Authors' reply re: Pre-eclampsia-like syndrome induced by severe COVID-19: a prospective observational study**

Sir,

Thank you kindly for the opportunity to respond to the letter from Dr Amorim and her colleagues.¹ We would like to thank Dr Amorim and her team for their interest in our study² and their invaluable observations.

We acknowledge that our series is small and heterogeneous. Our patients ranged from 20 to 37 weeks of pregnancy and only in one case did the pre-eclampsia-like (PE-like) syndrome resolve spontaneously and without being delivered. We, therefore, cannot affirm that all cases were PE-like syndrome, as we acknowledged in our article.

Although early and late pre-eclampsia (PE) may not have the same pathological pathways, they do share the same diagnostic criteria.³ We agree with Dr Amorim and her colleagues that the soluble fms-like tyrosine kinase-1 to placental growth factor ratio (sFlt-1/PlGF) and mean uterine artery pulsatility index (UtAPI) are generally predictive of early forms of PE; nevertheless, their negative predictive value before

37 weeks of gestation is extremely high (>97% for sFlt-1/PlGF <38) to exclude PE.^{4,5} For these reasons, we consider that there is no reason to believe that sFlt-1/PlGF is not a good tool to exclude the diagnosis of PE in the context of COVID-19.

Dr Amorim proposes that pre-eclampsia may act as a risk factor for developing severe or critical COVID-19. We would recommend being cautious about this statement, as there is no evidence published to date supporting this hypothesis and, in our series, the timeline of signs and symptoms is clear: COVID-19 pneumonia occurred prior to features of pre-eclampsia. Nevertheless, we do agree with Dr Amorim and her colleagues that our study is a small series and further research is needed to better understand the relation between PE and COVID-19. For this reason, we are very much looking forward to finding out the results of Dr Amorim's study. Meanwhile, we believe that patients with signs and symptoms of PE in the context of severe COVID-19 should be managed with caution, as, in some cases, these signs and symptoms could be caused by COVID-19 and sFlt-1/PlGF might be helpful in the management of these pregnancies, especially in preterm cases. ■

References

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