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LETTER:

e would like to thank Dr. Kanat for his commentary on both our manuscript and the larger discussion of subarachnoid hemorrhage SAH in COVID-19–positive patients. We regret that we did not discuss the case series by Batcik et al¹ in our report. The data collection and manuscript preparation of our manuscript was completed before the publication of their report.²

Our thinking is similar to that of Dr. Kanat regarding the importance of research in this area. As Dr. Kanat states and we discussed in our manuscript, there is a logical premise for host immune response to COVID-19 to promote vascular endothelial dysfunction and inflammation.² The study by Qureshi et al³ was an important step in elucidating this potential relationship. Although they did not find an increase in subarachnoid hemorrhage risk in COVID-19–positive patients, the influence of systemic comorbidities on these outcomes will be interesting to further

investigate. Further analysis of the data emerging from the COVID-19 pandemic will help to clarify these important points.

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LETTER TO THE EDITOR

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REFERENCES

- Batcik OE, Kanat A, Cankay TU, et al. COVID-19 infection produces subarachnoid hemorrhage; acting now to understand its cause: a short communication. Clin Neurol Neurosurg. 2021;202:106495.
- Dodd WS, Jabbour PM, Sweid A, et al. Aneurysmal subarachnoid hemorrhage in patients with coronavirus disease 2019 (COVID-19): a case series [e-pub ahead of print]. World Neurosurg. 2021. https://doi.org/10.1016/J.WNEU.2021.06.092, accessed July 7, 2021.
- 3. Qureshi AI, Baskett WI, Huang W, et al. Subarachnoid hemorrhage and COVID-19: an analysis of 282,718 patients. World Neurosurg. 2021;151:e615-e620.