

## HEMATOLOGY, TRANSFUSION AND CELL THERAPY



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## Letter to the Editor

## Hemoglobinopathy and COVID-19

Dear Editor,

We would like to share ideas on the publication "Hemoglobinopathy and pediatrics in the time of COVID-19.1" Vilela et al. concluded that, "Despite pediatric population with SCD needs more intensive care, the outcome after infection by COVID-19 is favorable.1" A previous report from Iran noted that patients with thalassemia/hemoglobinopathy had a possible susceptible nature to severe COVID-19.2 However, a report from Southeast Asia showed an opposite conclusion. Based on the data from our setting, Indochina, where beta-thalassemia and hemoglobin E are very common, only a few cases (less than 5) among more than 20,000 local COVID-19 patients had associated hemoglobinopathy. This marked low incidence might confirm the hypothesis on COVID-19 resistance of patients with hemoglobinopathy. Additionally, all infected cases with underlying hemoglobinopathy usually have mild symptoms. The effect of standard iron chelation therapy in patients with hemoglobinopathy is a possible explanation for mild COVID-19.4 Pharmacologically, the iron chelating agent can suppress endothelial inflammation, which is the main pathophysiologic mechanism in COVID-19.4

## **Conflicts of interest**

None.

REFERENCES

 Vilela TS, Braga JAP, Loggetto SR. Hemoglobinopathy and pediatrics in the time of COVID-19. Hematol Transfus Cell Ther. 2021;43(1):87–100.

- Karimi M, Haghpanah S, Azarkeivan A, Matin S, Safaei A, De Sanctis V. Coronavirus disease 2019 (COVID-19) severity in patients with thalassemias: a nationwide Iranian experience. Mediterr J Hematol Infect Dis. 2021 Jan 1;13(1): e2021008.
- 3. Papadopoulos KI, Sutheesophon W, Manipalviratn S, Aw TC. A Southeast Asian perspective on the COVID-19 pandemic: hemoglobin E (HbE)-trait confers resistance against COVID-19. Med Sci Monit Basic Res. 2021 Jan 5;27: e929207.
- Dalamaga M, Karampela I, Mantzoros CS. Commentary: could iron chelators prove to be useful as an adjunct to COVID-19 treatment regimens? Metabolism. 2020 Jul;108:154260.

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