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CORRESPONDENCE

Coagulation Abnormalities Due to COVID-19 in a Child with Thalassemia: Authors' Reply

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To the Editor: We thank Rujittika Mngmunpuntipantip and Viroj Wiwanitkit for sharing ideas related to our study on coagulation abnormalities due to COVID-19 in beta-thalassemia children, an issue of current public health importance [1]. In our study, the thalassemia patients had no other congenital hematological disorder comorbidities, especially sickle cell anemia or G-6-PD deficiency [2]. We have screened all of our patients for G-6-PD deficiency possibilities in the initial diagnosis. Pathological problem such vaso-occlusive crises (VOC) might be promoted in individual with both thalassemia and sickle cell disease, especially in alpha-thalassemia population [3]. However, there was no adequate evidence about the occurrence of VOC in beta-thalassemia alone, without sickle cell disease [4]. Abnormal coagulation disorder might also be related to liver-function impairment due to complication of thalassemia itself or as adverse effect of iron chelation use [5, 6]. Based on previous regular laboratory examination, all of included patients in the study had normal liver function without history of hepatitis. After getting infected with COVID-19, 2 of the 4 patients with thalassemia had slight increase in aspartate transaminase enzyme, but not more than 2 times the upper limit. We agree with the authors regarding the importance of excluding other possible confounding pathology that might result in abnormal coagulation profile, especially in SARS-Cov-2 infection associated with transfusion-dependent-thalassemia.

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Declarations

Conflict of Interest None.

References

1. Coagulation Abnormalities Due to COVID-19 in a Child with Thalassemia: Correspondence. Indian J Pediatr. 2021. https://doi.org/10.1007/s12098-021-03811-8.
2. Marhaeni W, Wijaya B. Khairiyadi, Munawaroh, Hendriyono. Coagulation abnormalities due to COVID-19 in a child with thalassemia. Indian J Pediatr. 2021;88:396–7.
3. Renoux C, Connes P, Nader E, et al. Alpha-thalassaemia promotes frequent vaso-occlusive crises in children with sickle cell anaemia through haemorheological changes. Pediatr Blood Cancer. 2017;64. https://doi.org/10.1002/pbc.26455.
4. Vilela TD, Braga AP, Loggetto SR. Hemoglobinopathy and paediatrics in the time of COVID-19. Hematol Transfus Cell Ther. 2021;43:87–100.
5. Abosdera MM, Almasry AE, Abdel-Moneim ES. Coagulation defects in thalassemic patients. Pediatr Neonatol. 2017;58:421–4.
6. Angchaisuksiri P, Atichartakarn V, Aryurachai K, et al. Hemostatic and thrombotic markers in patients with hemoglobin E/B-thalassemia disease. Am J Hematol. 2007;82:1001–4.