Authors' reply

Sir

We thank M. D. Al-Mendalawi.^[1] for their interest in our case report^[2] and the insightful comments. We agree that association of malaria and hemolytic uremic syndrome-thrombotic thrombocytopenia purpura (HUS-TTP) may not be causal and only a few cases have been described hitherto. However, ADAMTS13 activity and antigen levels have been reported to be reduced in patients with falciparum as well as vivax malaria.^[3] This evidence of endothelial injury in malarial infections is

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intriguing and needs to be explored. Furthermore, given the vivax malaria increasingly being reported as a cause of severe malaria, [4] it will be interesting to study what proportion of them have HUS-TTP.

Thrombotic microangiopathy is a histologic description that is characteristic of several diverse disorders, such as malignant hypertension and scleroderma, as well as TTP and HUS.^[5,6] When the patients with microangiopathic hemolytic anemia and thrombocytopenia are initially evaluated, the comprehensive term TTP-HUS can probably be the best one to describe the clinical entity seen in our patient.

We agree that a complete evaluation including assessment of ADAMTS13 activity and genetic and autoimmune tests to identify a complement-related defect is required, which could not be done in our case. In absence of such a detailed evaluation, there remains a possibility of presence of underlying complement disorder where HUS was triggered by malarial infection. Infections, including diarrhea, are known as a trigger to develop HUS in patients having complement dysregulation.^[7,8]

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References

- Al-Mendalawi MD. Hemolytic uremic syndrome associated with Plasmodium vivax malaria successfully treated with plasma exchange: Authors' reply. Indian J Nephrol 2014;24:331.
- Keskar V S, Jamale T E, Hase N K. Hemolytic uremic syndrome associated with Plasmodium vivax malaria successfully treated with plasma exchange. Indian J Nephrol 2014;24:35-7.
- de Mast Q, Groot E, Asih PB, Syafruddin D, Oosting M, Sebastian S, et al. ADAMTS13 deficiency with elevated levels of ultra-large and active von Willebrand factor in P. falciparum and P. vivax malaria. Am J Trop Med Hyg 2009;80:492-8.
- Singh H, Parakh A, Basu S, Rath B. Plasmodium vivax malaria: Is it actually benign? J Infect Public Health 2011;4:91-5.
- Laszik ZG, Silva FG. Hemolytic-uremic syndrome, thrombotic thrombocytopenic purpura, and other thrombotic microangiopathies. In: Jennett JC, Olson JL, Schwartz MM, Silva FG, editors. Heptinstall's Pathology of the Kidney. 6th ed. Philadelphia: Lippincott Williams and Wilkins; 2007. p. 701-64.
- George JN. How I treat patients with thrombotic thrombocytopenic purpura: 2010. Blood 2010;116:4060-9.
- Sellier-Leclerc AL, Fremeaux-Bacchi V, Dragon-Durey MA, Macher MA, Niaudet P, Guest G, et al. Differential impact of complement mutations on clinical characteristics in atypical

hemolytic uremic syndrome. J Am Soc Nephrol 2007;18:2392-400.
Noris M, Caprioli J, Bresin E, Mossali C, Pianetti G, Gamba S, et al. Relative role of genetic complement abnormalities in sporadic and familial aHUS and their impact on clinical phenotype. Clin J Am Soc Nephrol 2010;5:1844-59.

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