Thalassemia, Protein C, Protein S and Infarct: Correlation?

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Sir,

I read the report on an interesting case of beta-thalassemia/hemoglobin E (b-thal/HbE) by Vineeta et al. with a great interest [1]. Vineeta et al. concluded that “Protein C and Protein S deficiency were the causative factor for developing hemorrhagic infarct in the HbE/ Beta thalassemia patient [1].” In fact, it can be confirmed that there existed a case of a combined genetic disorder between HbE and IVS1-5 mutation. However, the conclusion proposed by Vineeta et al. should be carefully considered. Firstly, a single case report is not a standard report to set any correlation in clinic. A systematic case control study must be performed to get the cause and outcome relationship. Secondly, the hemorrhagic infarct has no doubt related to abnormal Protein C and Protein S, but further referred linkage to β -thalassemia/HbE cannot be directly assumed. There must be a complete proposed biological process based on gene ontology principle to confirm this correlation.

References

1. Vineeta S, Biswas A, Bijender K, Renu S. Protein C and protein S: causative factor for developing a hemorrhagic infarct in a HbE/Beta thalassemia child. Indian J Pediatr. 2010 Jan 20. [Epub ahead of print].

Author's reply

Sir,

We appreciate Dr. Viroj for his valuable comments. It is true that single case report can not make a significant contribution to the clinic but hemorrhagic Infarct in HbE/ β thalassemia is a rare event which makes this report important.

We have mentioned in our report that that there was no positive family history of thrombosis in case of patient. Acquired Protein C, and S deficiency has been observed in many thalassemia intermedia and sickle cell patients, which might be due to Hepatic and endothelial dysfunction.

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