Letters to the Editor

In response to HMOX1 microsatellite polymorphism by Cao et al

To the Editor:

We read the article titled "HMOX1 promoter microsatellite polymorphism is not associated with high altitude pulmonary edema in Han Chinese" by Cao et al with profound interest.[1] The authors of this study have concluded that the microsatellite polymorphism in the HMOX1 gene promoter is not associated with high altitude (HA) pulmonary edema (HAPE) in Han Chinese. There has been a worldwide shift in focus among the scientific community toward research involving the proteomics and genomics aspects of this disease process. This is also evident in the present study, but the presentation of the physiologic/clinical aspects of the data appears to have taken a backseat.

We would like to seek more information regarding the status of the non-HAPE lowland participants in terms of the time spent at HA before their clinical examination was done and blood samples collected. Hematological parameters like hemoglobin level are definitely affected by the duration and quantum of hypoxia exposure in all individuals at HA.[2] Elaboration on this aspect would enable better understanding of the results of the comparison of the 2 groups. Similarly, a word on the average time for presentation of HAPE symptoms in patients after entry in HA before they were hospitalized could have elucidated their clinical presentation further. It would also be interesting to know the duration and details of HAPE treatment (oxygen/nifedipine) provided to these patients and the timing of clinical examination measurements in the hospital. If it was not done at the time of hospitalization, then clarification on cessation of treatment before the examination was carried out would be remarkable. It is evident that from the mean resting heart rate (118±17 beats · min^{-1}) of HAPE participants (n=83) that they had a moderate grade of HAPE.[3] Especially in the background of the very low blood oxygen level of HAPE participants (54±19%), additional information on respiratory rate of these participants would complete their clinical profile.

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References

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3. Schoene RB, Swenson ER, Hultgren HN. High altitude pulmonary edema. In: Hornbein TF, Schoene RB, eds. *High Altitude: An Exploration of Human Adaptation.* New York: Mercel Dekker; 2001:777–814.

In Reply to Drs Sikri and Bhattachar

To the Editor:

We thank Drs. Sikri and Bhattachar for their response[1] to our recent study, "HMOX1 promoter microsatellite polymorphism is not associated with high altitude pulmonary edema in Han Chinese," published in *Wilderness & Environmental Medicine*.[2] Our study has clarified the link between microsatellite polymorphism in the heme oxygenase-1 (HMOX1) gene promoter and high-altitude pulmonary edema (HAPE) in Han Chinese and may attempt to explore the pathogenesis of HAPE. The exact pathophysiologic mechanisms of HAPE are still unclear. Recently, increasing evidence has shown that HAPE is the result of a combination of genetic and environmental factors, but the role of genetics has not been clearly determined.[3,4] We assumed that heme oxygenase-1 promoter region microsatellite polymorphism may be related to HAPE.