

Hematocrit level and cardiovascular risk among Thai taxi drivers: additional concern

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Dear Editor, the recent report on “hematocrit (HCT) level and cardiovascular risk among Thai taxi drivers” is very interesting¹. Ishimaru et al. concluded that “obesity ($p=0.007$), daily alcohol drinking ($p=0.003$), and current or past smoking ($p=0.016$) were associated with higher HCT levels¹.” In fact, it is no doubt that the mentioned factors are related to HCT level. In Thailand, where Ishimaru et al. performed the study¹, the thalassemia and hemoglobin (Hb) disorder (e.g. Hb-E) is very prevalent (estimated 30 % of the local people are carriers of the disorder)² and this is an important confounding factor that results in an aberrant HCT level. Indeed, the similar problem (thalassemia and hemoglobin disorder) is also common in many areas of the world such as in South Asia, Mediterranean and Africa and there is a similar concern on interpretation of HCT level and cardiovascular risk. In cases with underlying Hb disorder, there might be a low HCT background and the relationship between HCT level and cardiovascular risk should be assessed. In a recent report, the thalassemic patients with a cardiovascular problem usually have lower pre-transfusion HCT level³. Chen et al. recently reported the association between “coronary artery disease (CAD)”

and HCT level in thalassemia patients⁴. Chen et al. noted that “the overall risks of developing CAD were 1.5-fold in patients with thalassemia compared with those in the comparison cohort after adjustment for age, sex, and comorbidities⁴.” If one has an underlying of thalassemia/Hb disorder with low HCT, the risk of coronary thrombosis is still high.

References

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