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Correspondence

Higher homocysteine levels in young Indian adults: Impact of vitamin B12 & folate deficiencies

Sir,

An article by Gupta and colleagues[1] on the role of homocysteine and *MTHFR* C677T gene polymorphism as risk factors for coronary artery disease in young Indians, published recently provides information about the risk factors of coronary artery disease; high levels of homocysteine, total cholesterol, LDL cholesterol and low levels of HDL cholesterol and smoking as an independent predictors in young Indians. There are certain issues which need to be clarified:

First, the blood homocyteine levels were used as one of the main parameters measured in the cases and controls. As the authors also emphasized, mean blood homocysteine levels were found higher than the normal range in both cases and controls. They explained this state, the possible result of dietary deficiency of vitamin B6, B12 and folic acid as seen in Indian population[2,3]. Thus the reason for higher homocysteine levels observed in both the groups due to either *MTHFR* mutations or dietary vitamin deficiencies could not be assessed clearly. They did not measure blood folate and vitamin B12 levels to evaluate these deficiencies. The effect of vitamin deficiencies on the results of this study might be as a confounding factor. It could be suggested that measuring blood levels of vitamin B12 and folate might lead to a better evaluation of study groups according to their deficiency states. Assessment of groups separately would enable to interpret the effects of vitamin B12 and folic acid administration more precisely.

Second, according to Table III which shows the mean levels of cholesterol, LDL-C, HDL-C, triglycerides levels, the mean total cholesterol level (154 mg/dl) is lower than LDL cholesterol level (157 mg/dl) in the control group. Since total cholesterol level could not be lower than LDL-C concentrations, there appears to be a possible typographic error in the value of mean LDL-C levels of controls group.

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