

## **Letter to the Editor**

### **The Role of Supplements in Reducing Cardiovascular Events by Decrease in Highly Sensitive C-reactive Protein and Serum Homocysteine**

*To the Editor,*

We read with interest the article entitled “The Relationship between Serum Homocysteine and Highly Sensitive C-reactive Protein (HSCRP) Levels in Children on Regular Hemodialysis” published in your esteemed journal.<sup>1</sup>

In this study, Abdel-Salam et al reported that the HSCRP and serum homocysteine are cardiovascular risk predictors. Furthermore, they found a significant relationship between HSCRP and serum homocysteine and blood pressure, cholesterol, triglyceride, parathormone, and ferritin levels.<sup>1</sup>

We studied the role of Vitamin C and Vitamin B<sub>12</sub> in patients with end-stage renal disease (ESRD) to reduce the level of HSCRP and serum homocysteine, respectively.<sup>2,3</sup> In addition, Mirchi et al evaluated the level of 25-hydroxyvitamin D<sub>3</sub> in hemodialysis patients and its relationship with HSCRP.<sup>4</sup> Interestingly, there was a significant correlation between the serum Vitamin D level and inflammatory factors such as HSCRP and neutrophil-lymphocyte ration.<sup>4</sup> Furthermore, there were some positive results with Group B vitamins and Vitamin E coated dialyzer in some studies about the inflammatory factors;<sup>3,5,6</sup> however, there was no considerable effect for Vitamin K and A.

Thus, based on previous researches, water-soluble supplements, Vitamin D and Vitamin E could be useful for ESRD patients to prevent

the risk of brain stroke, myocardial infarction, and peripheral vascular disease by reduction in inflammatory agents.<sup>7-9</sup>

Finally, the role of supplements must be considered in ESRD patients to reduce the cardiovascular complications.

**Conflict of interest:** None declared.

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