MICRONUTRIENT STATUS OF COPPER IN HEMODIALYSIS PATIENTS

Rahim Raoofi1 , Alireza Yousefi2 , Abdolreza Sotoodeh Jahromi3 , Akbar Kazemi4 *, Hassan Zabetian5 , Jalil Rajabi6

ABSTRACT: Regarding the role of dialysis in the disposal of body waste, the removal of necessary micronutrients and elements, including copper, from blood is possible. Considering the role of copper in the performance of immune system, investigation into this matter is very important. Here, we measure the level of those elements in hemodialysis patients and compare it with the control group. This case-control study was done on 52 dialysis patients in the case group and 52 healthy people in the control group. The subjects were matched in terms of gender and other factors. The amount of copper in their serum was calculated, using Atomic Absorption method, and then the results were statistically analyzed. The levels of copper in the case and control groups were 58.3±21.95 µgr/dl and 106.01±56.88 µgr/dl, respectively. That degree of copper deficiency in the case group was statistically significant (p=0.001). Regarding that serum level of hemodialysis patients is higher than normal people, taking required measures including the administration of supplementary nutrition should be considered. Due to the discrepancy in findings of different studies, conduction of a review study is recommended.

Keywords: Hemodialysis Patients, Copper, Iran.