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LETTER TO THE EDITOR

Serum uric acid and albumin are affected by different variables in Parkinson's disease

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Dear Editor-in-Chief

We read the research study entitled "Impact of serum uric acid, albumin and their interaction on Parkinson's disease" by Wang L et al. [1] that was published in Neurological Sciences Journal on October 2016 (https://doi.org/10.1007/s10072-016-2738-z). Wang L et al. reported that serum concentrations of uric acid (UA) and albumin were markedly lower in patients with Parkinson disease compared to healthy individuals. Different studies have reported that serum UA and albumin are under influence of multifactorial variables [2–5].

The following are the shortcomings observed:

Different factors affect the parameters of the study, such as stress and strenuous exercise will falsely elevate UA [6, 7], and many drugs cause an increase or decrease in UA (allopurinol, aspirin, etc.) [8–10]. Also, purine-rich diet and metabolic syndrome (e.g., liver, kidney, sweetbreads) increase UA levels [11, 12]. Furthermore, high levels of aspirin decrease UA levels and low purine intake, coffee, and tea decrease UA levels [13, 14]. How did you control these factors?

Given that the albumin is a negative acute-phase protein and can be affected by nutritional conditions, aging, medical conditions such as cancer, liver dysfunction, inflammation, malnutrition, and a kidney problem, and etc. [15, 16], can albumin be considered as a biomarker?

The cut-off values and the sensitivity and specificity of serum UA and albumin levels have not been calculated for this study.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflicts of interest.

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