

Letter to the Editor

Ferritin, adenosine deaminase and body mass index

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Dear Sir,

We submit our disagreement on 'Correlation of Serum Ferritin and Adenosine Deaminase with Body Mass Index in Children: A cross-sectional study'.^[1] Sahu *et al.* concluded that 'Serum Ferritin and ADA, which are markers of inflammation, were elevated in obese children compared to ... anthropometric indices in the future'.^[1] There are many confounding factors in measurement of ferritin and ADA. There are laboratory notifications for recognising problems with ferritin measurement in patients with underlying diseases. In adult population, chronic kidney disease and chronic lung disease can alter the measured ferritin level.^[2,3] In the patients with those underlying diseases, the misleading might be possible if ferritin is used as a biomarker.^[2,3] Furthermore, intake of some supplementations and endurance exercises can also affect ferritin levels.^[4] Focusing on ADA, its level might be affected by some drugs such as antipsychotic drugs.^[5] Some infections such as tuberculosis can also affect ADA levels.^[6]

Regarding the present study, the interferences from some mentioned concurrent conditions might not occur, but there is still possibility of interference. As already mentioned, the underlying illness of the cases might affect the laboratory results. We would like to draw attention to an important possible confounding interference that can affect the ferritin measurement and it also has a discordant clinical presentation with the proposed observed relationship between ferritin and obesity. For ferritin, it is elevated in cases with underlying thalassemia regardless of obesity^[2] and most thalassemic cases are not obese.^[7] Thalassemia trait is not an uncommon medical problem and it might be difficult to diagnose without a screening. Rathaur *et al.* mentioned that they found an association between serum ferritin and growth disorder in children with thalassemia.^[8] Hence, it might not support the claim that serum ferritin is a good marker in obese children.^[1]

Declaration of patient consent

Patient's consent not required as there are no patients in this study.

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Nil.

Conflicts of interest

There are no conflicts of interest.

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