

LETTER TO THE EDITOR

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Association of new obesity indices: visceral adiposity index and body adiposity index, with metabolic syndrome parameters in obese patients with or without type 2 diabetes mellitus

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To the Editor,

I read with interest the study by Rashad and Emad [1] published in the October to December 2019 issue of *The Egyptian Journal of Internal Medicine*. On using International Diabetes Federation (IDF) definition for metabolic syndrome (MetS), Rashad and Emad [1] assessed the association of the new obesity indices, visceral adiposity index (VAI) and body adiposity index (BAI), with the parameters of MetS in a cohort of Egyptian obese patients. They found that BAI and VAI and MetS parameters (triglycerides and high-density lipoprotein cholesterol) might reflect indirectly other non-classical risk factors correlated with the occurrence of obesity-related co-morbidities [1]. I presume that such findings ought to be cautiously exercised. This is based on the presence of the following methodological limitation related to the tool employed in the diagnosis of MetS. The role of this limitation could be addressed in two aspects. On one hand, it is obvious that there are many MetS definitions, namely National Cholesterol Education Program Adult Treatment Panel III (NCEP-ATP III), IDF, American Heart Association (AHA), Joint Interim Statement (JIS), and World Health Organization (WHO). Importantly, there is an inconsistent consensus on the accuracy of different definitions to diagnose MetS [2, 3]. Estimating the MetS prevalence in adult Egyptian population employing various definitions interestingly disclosed different results, notably 43.8% (AHA definition),

42.5% (NCEP-ATP III definition), 44.3% (IDF definition), 33.8% (IDF definition with Egyptian cutoffs), and 41.5% (JIS definition with Egyptian cutoffs) [4]. On the other hand, the IDF definition employed in the study by Rashad and Emad [1] is old dated back to 2005 and consists of European cutoffs for MetS parameters [5] making it inconvenient to be utilized in clinical practice and research purposes for Egyptian population. It has been recommended that the JIS definition with an Egyptian cutoff represents the most suitable tool for defining MetS in Egyptians [4]. Thus, its utilization instead of IDF definition in the study methodology by Rashad and Emad [1] could make the study results more accurate.

Abbreviations

IDF: International Diabetes Federation; MetS: Metabolic syndrome; VAI: Visceral adiposity index; BAI: Body adiposity index; NCEP-ATP III: National Cholesterol Education Program Adult Treatment Panel III; AHA: American Heart Association; JIS: Joint Interim Statement; WHO: World Health Organization

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Consent for publication

Not applicable

Competing interests

None

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