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Comparison of Serum Adipocytokine Levels according to Metabolic Health and Obesity Status (*Endocrinol Metab* 2015;30:185-94, Tae Hoon Lee et al.)

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Obesity is a major public health problem worldwide, being an important risk factor for the development of metabolic syndrome, type 2 diabetes mellitus, and cardiovascular disease, consequently increasing all-cause mortality [1]. However, metabolically healthy obesity (MHO), a subtype of obesity, is associated with the absence of metabolic abnormalities such as dyslipidemia, insulin-resistance, and hypertension; all-cause mortality is not elevated [2]. Therefore, it is important to distinguish those with MHO from other obese subjects, and to use a different strategy to treat those with MHO. Lee et al. [3] studied biomarkers that might indicate the status of metabolic health. Serum tumor necrosis factor α (TNF-α) and adipocyte fatty acid binding protein (A-FABP) levels were higher in metabolically unhealthy non-obese subjects than in those with MHO. Although differences between obese groups were not apparent, the work suggested that TNF-α and A-FABP levels might serve as markers of metabolic status.

Work on MHO is associated with certain challenges. First, no consensus has yet emerged on how MHO should be defined. Phillips and Perry [4] showed that both the prevalence of MHO and the levels of supposedly relevant inflammatory markers varied when different definitions of MHO were used. Second, although body mass index (BMI) is commonly used to identify obesity, this measure does not discriminate between lean and fat body mass [1]. Velho et al. [5] also found that the prevalence of MHO varied when different criteria were used to define the condition, and when obesity was variously defined by reference to BMI, body fat percentage, and waist circumference. However, the cited authors did evaluate several markers of obesity. Therefore, I wonder whether the authors have explored the possible existence of relationships between adipocytokine levels and MHO using the various MHO criteria (combinations of certain obesity markers). I respectfully suggest that such data could be very useful. In general, a better understanding of the relationships between the levels of certain biomarkers and MHO requires that further longitudinal studies be conducted.

CONFLICTS OF INTEREST

No potential conflict of interest relevant to this article was reported.

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