Comment on "Importance of epicardial adipose tissue as a predictor of heart failure with preserved ejection fraction"

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Dear Editor,

We read the recent study performed by Ateş et al[1]. with great interest, which underscores the importance of epicardial adipose tissue as a predictor for heart failure with preserved ejection fraction. The research highlights the pivotal role of this adipose tissue in anticipating the likelihood of developing this specific type of heart failure. Through an exploration of its correlation with various clinical parameters and outcomes, the study emphasizes the potential utility of epicardial adipose tissue as a valuable prognostic marker for individuals at risk of heart failure with preserved ejection fraction. These findings provide insightful perspectives into the complex interplay between adipose tissue and cardiovascular health, thereby opening avenues for more precise risk assessment and targeted interventions in clinical practice. Nevertheless, there are certain issues that warrant attention and resolution.

First, there is some ambiguity regarding the variables included in the univariate and multivariable logistic regression analyses in this study[1]. As indicated in Table 2 of the study[1], variables such as age, epicardial adipose tissue (EAT), left ventricular mass index (LVMI), waist circumference, left atrial volume index (LAVI), and E/é were incorporated into both univariate and multivariable logistic regression analyses. However, it remains unclear whether other factors like hemoglobin, NT-proBNP (N-terminal pro-brain natriuretic peptide), and glomerular filtration rate (GFR) were also included in the logistic regression analysis. Previous studies have underscored the relevance of various factors to heart failure prognosis, notably NT-proBNP. For instance, a study[2] encompassing 3,562 heart failure patients with preserved ejection fraction demonstrated a correlation between elevated NT-proBNP levels and baseline characteristics, including atrial fibrillation, NYHA IV symptoms, and lower estimated glomerular filtration rate. Yet, Table 2 of the present study[1] does not depict the relationship between NT-proBNP and heart failure with preserved ejection fraction. We are wondering whether all confounding factors, such as NT-proBNP, were included in the univariate and multivariable logistic regression or only a subset of the parameters from Table 1[1] was considered. Given these points, a more comprehensive understanding of the factors considered in the multivariable analysis would greatly enhance the study's findings. It would also aid in evaluating the potential interactions and interplay of various variables in predicting heart failure with preserved ejection fraction.

Furthermore, as described in the study[1], epicardial adipose tissue was assessed using transthoracic echocardiography. However, the study does not provide a detailed account of the timing of the echocardiographic examinations – were they conducted prior to medication treatment, during treatment, or post-treatment? Considering that this timing significantly correlates with epicardial adipose tissue measurements, clarity on this aspect would provide valuable context for interpreting the results accurately. Therefore, it becomes evident that understanding the relationship between the timing of echocardiographic assessments and epicardial adipose tissue measurements could offer deeper insights into the dynamics of this tissue in the context of heart failure with preserved ejection fraction. Addressing this temporal aspect would undoubtedly enhance the comprehensiveness of the study's findings and their potential implications for clinical practice.

AUTHORS' CONTRIBUTIONS

XQ: Conceptualization, Investigation, Supervision, Writing – original draft, Writing – review & editing. **CY:** Conceptualization, Investigation, Supervision, Writing – original draft, Writing – review & editing.

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