LETTER TO THE EDITOR

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Dear editor,

The article "Evaluation of malnutrition statuses in systolic heart failure patients" by Özyiğit et al (1) which was published in the last issue of Turkish Medical Student Journal was certainly an interesting read. The heart diseases have been classified as the number one cause of death worldwide by the World Health Organization, and they are responsible for 17.9 million deaths annually (2). Hence, the significance of evaluating and following up such patients closely needs no justification. We have paid special attention to this study and we would like to make certain comments.

The aim of the study was to evaluate the nutritional statues of the subjects with systolic heart failure and to evaluate how well aware they are of their condition. The Mini Nutritional Assessment (MNA) test was used as the only method for evaluation, the subjects' use of medication and their relation to nutrition levels were not examined in depth. Echocardiography findings were documented as well, the results of which could be reinforced by stress tests in order to get a clear picture of cardiac function. Biochemical and hemodynamic parameters were also documented, however more attention could have been paid towards the specific micronutrients that are, according to the literature, directly related to malnutrition, as discussed later. It is important to point out that the age group of this study did not match the ones recommended for the use of the MNA test, a limitation mentioned in the study. In our opinion, the colleagues could have used additional methods that have been previously employed by similar studies in the literature.

Lee et al. (3) investigated the role of micronutrients such as coenzyme Q10, L-carnitine, thiamine, riboflavin, pyridoxine, amino acids such as taurine, omega-3 fatty acids, and vitamins (especially vitamin D) in cardiac metabolism. Many of them were found to be deficient in patients with heart failure (3). The benefits of supplementation of some, such as thiamine and L-carnitine, were also studied, but further investigations are needed to demonstrate if they would actually prove any benefit.

Additional methods that have previously been used in similar studies include the exercise tolerance test, and the Controlling Nutritional Status (CONUT), an automated assessment method that uses laboratory results such as level of total cholesterol, total lymphocyte count and albumin in serum to assess nutritional status (4). Lastly, the Geriatric Nutritional Risk Index (GNRI), a new index for the evaluation of elderly patients, is also a method widely used nowadays (5).

Furthermore, the evaluation of the nutritional statuses of patients with systolic heart failure could be aimed at investigating the correlation with mortality as done by Aggarwal et al (6). The study has shown that the mortality rate is independent of the degree of malnutrition of patients based on the MNA and a complete nutritional assessment (6).

Heart disease is a growing epidemic and we would like to encourage the continuation of this study with the use of further evaluation methods such as the ones mentioned above. What is more, we would recommend close follow up of these patients and a further investigation into their backgrounds (e.g. economic status) which is proved to be directly related to nutrition (7).

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