

Letters to the Editor

Nutritional Status, Heart Failure and Minimum Basic Data Set

Situación nutricional, insuficiencia cardiaca y Conjunto Mínimo Básico de Datos

To the Editor,

After reading the original article by Zapatero et al.¹ about the influence of nutritional status on the outcomes of patients with heart failure, we would like to remark on a couple of points. The studies performed in Spain showing malnutrition as an unfavorable prognostic factor and obesity as a protective factor in the outcome of heart failure classified patients according to objective nutritional criteria (such as body mass index [BMI], Mini Nutritional Assessment, or other tools for assessing nutritional status).^{2,3} The study by Zapatero et al.¹ identified 2 patient groups according to the ICD-9-CM codes obtained from the Minimum Basic Data Set (MBDS). In their study, obese patients accounted for 11.1% and malnourished patients for 1.1% of all patients with heart failure included in the analysis. Grouping patients according to their nutritional status taken from analysis of the MBDS is subject to limitations and so caution should be exercised when interpreting the results obtained from such analyses.

First, the patients have not been classified using an objective tool for assessing nutritional status. The ICD-9-CM would have allowed the use of BMI as, within the supplementary classification of factors that influence the state of health and contact with health services, BMI is collected with codes V85.0 to V85.5.⁴

Second, the analysis of MBDS underestimates the true impact of malnutrition and obesity. As discussed by the authors themselves, using the MBDS approach, 1.4% of patients admitted to hospital in internal medicine departments were identified as malnourished compared to 25% to 50% in prospective studies, with the main reason for the discrepancy being underreporting.¹ The same applies to obesity. In several studies performed in children (in whom weight, height, and BMI are obtained systematically, unlike in adult populations), analysis of the MBDS showed that only 7.4% to 8.5% of patients were obese and that they also had a significantly higher BMI than other patients in this group.^{5,6} Although some studies have shown a good correlation and reliability on comparison of the MBDS with clinical databases and registries,¹ this is not the case with the nutritional status of the hospitalized patients, as shown by the discrepancy between the MBDS results and those of the Spanish Heart Failure Registry (abbreviated as RICA in Spanish).³ This registry, which included 712 patients admitted consecutively for uncompensated heart failure to the internal medicine departments of 52 hospitals, showed that 37.3% were overweight and 36.5% were obese.³ These values are in line with those from other prospective studies in Spain,² and more than 3 times higher than those reported from analysis of the MBDS (11.1%). This poor performance of the MBDS for assessing the nutritional status of hospitalized patients has prompted the Spanish Society for Parenteral and Enteral Nutrition

to set up initiatives to enable more accurate coding and classification.

On the other hand, it is likely that there was a selection bias in patients identified by diagnostic codes for obesity or malnutrition as these patients would correspond to the most extreme cases for the 2 nutritional situations (very malnourished or very obese), as has been described.⁶

Finally, this study shows the importance to clinical management of including diagnoses and procedures related to the nutritional status of the patient in the discharge report and correct coding. This would allow, among other things, rationalization of the resources used without negatively affecting the efficiency of the unit or department.

Although there is evidence that administration of nutritional supplements can reduce mortality in elderly malnourished patients, we agree with the authors that studies are needed to clarify whether early nutritional screening and nutritional intervention in patients with heart failure could improve their outcomes.

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