EDITORIAL

Hospital Malnutrition, Inflammation, and Cardiovascular Diseases

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Instituto de Cardiologia do Rio Grande do Sul/Fundação Universitária de Cardiologia,¹ Rio Grande do Sul, RS - Brazil Hospital do Coração (Hcor),² São Paulo, SP - Brazil Editorial related to the article: Prevalence of Malnutrition and Its Association with Clinical Complications in Hospitalized Cardiac Patients: Retrospective Cohort Study

Malnutrition in hospitalized patients, whose prevalence ranges between 40% and 60% in Latin America,¹ is related to longer hospital stays, worse clinical outcomes,² and increased hospitalization costs.³ The consequences related to hospital malnutrition have also been reported among patients diagnosed with cardiovascular disease (CVD).⁴ In these individuals, an exacerbated inflammatory state is associated with malnutrition, loss of muscle mass, and cardiac cachexia, especially in the more advanced stages of the disease.⁵

Globally, there is a policy that aims to recognize the importance of hospital malnutrition and its consequences.⁶ In Brazil, in 2018, the campaign "Say no to malnutrition" was published, composed of 11 steps to combat hospital malnutrition.⁷ In this campaign, the first step involves risk stratification and nutritional assessment for subsequent implementation and monitoring of appropriate nutritional therapy.

In a retrospective cohort published by Ávila et al.,⁸ 130 cardiac patients admitted to a referral hospital underwent nutritional assessment, among whom, 27% were malnourished. In comparison to well-nourished patients, these individuals were older, needed longer time in the intensive care unit (ICU), and stayed more than 7 days in the hospital – data in accordance with the literature.^{2,4} In this study, the prevalence of malnutrition was lower than those reported in the literature among the general population,¹ which may have occurred due to the profile of the evaluated patients, who, for the most

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Mailing Address: Camila Weschenfelder Av. Princesa Isabel, 395. Postal Code: 90040-371, Porto Alegre, RS – Brazil. E-mail: camilawesche@gmail.com part, were classified as low metabolic stress. Patients using enteral and/or parenteral nutritional therapy, and patients admitted to the emergency room, ICU, or undergoing immediate surgery, were not included in the study. Thus, patients who were assessed for nutritional status may not have reflected the population with CVD with a more pronounced and/or severe inflammatory state, underestimating the frequency of malnutrition in this population.

Inflammation plays an important role at the time of nutritional diagnosis. Seeking to standardize the criteria used for the diagnosis of malnutrition, a consensus of the European Society for Enteral and Parenteral Nutrition (ESPEN)⁹ proposes the use of the Global Leadership Initiative on Malnutrition (GLIM) tool. This tool includes phenotypic criteria (non-volitional weight loss, low body mass index, and reduced muscle mass) and etiologic criteria (reduced food intake or assimilation, and inflammation or disease burden). However, as this tool includes the measurement of the muscular compartment by validated body composition techniques, which may not be common in clinical practice, due to the necessary protocols or the costs involved, the GLIM tool ends up rarely being used in daily routines.

By contrast, the association between excess weight and CVD is widely recognized.¹⁰ Patients evaluated in this study seem to reflect the population of wards in hospital cardiology units affected by ischemic diseases in milder forms and/or with a lesser degree of inflammation of the disease, for example, angina (25% of the sample evaluated).

Finally, malnutrition is frequent in the hospital environment and needs to be investigated early by nutritionists, especially among patients affected by CVD, whose mortality is high. Adequate nutritional diagnosis

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and the establishment of adequate nutritional therapy for treatment enable the improvement of the patient's quality of life, as well as a reduction in complications and costs related to hospitalization. The article published by Ávila et al.,⁸ demonstrates the importance of the early identification of the nutritional status of hospitalized patients with CVD, for immediate implementation of appropriate nutritional therapy aimed at reducing hospital malnutrition and, therefore, the reduction of associated outcomes, such as ICU and hospital stay.

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