

The Nutritional Status in Heart Failure Patients

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Received: September 24, 2020; **Published:** October 30, 2020

Abstract

The main focus of present research was to evaluate the nutritional status through the Global Subjective assessment (SGA), in hospitalized patients with heart failure, into services of Cardiology and Internal Medicine Services at the Hospital Universitario de Caracas (HUC), during the period between August and October 2018. An association was found between functional class III and IV and the nutritional status corresponding to severe and moderate malnutrition, respectively, which can also be associated with a poor prognosis in patients with heart failure.

Keywords: *Evaluation; SGA; Nutritional Status; Heart Failure*

Introduction

In recent years, different studies have shown a high prevalence of hospital malnutrition in Latin America, finding that nearly 50% of the hospitalized population is admitted with some degree of malnutrition. The ELAN Study (Latin American Study of Nutrition), carried out in 12 countries, showed that approximately 50.2% of the hospitalized population present some type of malnutrition, in older adults [1].

Protective-caloric malnutrition alters the clinical course of the patient during hospitalization, causing an increased risk of morbidity, mortality, alteration of the immune system, greater risk of suffering from infections, slower healing and greater number of complications. The Subjective Global Assessment (VGS) is a widely used tool in current practice and continues to be the oldest, simplest and most widely used nutritional screening method that best predicts the risk of post-surgical complications.

Malnutrition in heart failure (HF) is associated with loss of muscle mass, fat, and bone mass. Its causes may be due to decreased caloric intake, increased loss of nutrients, increased metabolic rate and dysfunction of cytokine [2].

The main focus of present study will evaluate the nutritional status of patients with a clinical diagnosis of HF, hospitalized in the Cardiology and Internal Medicine Services of the Hospital Universitario de Caracas (HUC).

Materials and Methods

The study population consisted of patients with a diagnosis of HF in the Cardiology and Internal Medicine Services of the Hospital Universitario de Caracas, during the period August-October 2018. Consisting of a sample of 40 subjects who met the inclusion criteria, being intentional and not probabilistic. The Subjective Global Assessment (VGS) instrument was applied, which was systematized by Detsky, *et*

al. [3] and adapted, as described by Yamauti, *et al* [4]. It was classified according to the categories: Well Nourished < 17 points; B: Moderately Malnourished or at Risk of Malnutrition $17 \leq 22$ points; C: Severely malnourished > 22 points.

Statistical analysis

The frequencies of the nominal variables and the crosses of variables were analyzed with the help of statistical package SPSS. It was classified according to the categories: Well nourished < 17 points; B: Moderately malnourished or at risk of malnutrition $17 \leq 22$ points; C: Severely malnourished > 22 points.

Result and Discussion

The study consisted of 40 patients and age of this sample was 66 ± 14 years, 28 men and 12 women with predominance of the male gender. It was evidenced that the majority of patients had functional class II/VI. In the relationship with comorbidities, predominance of hypertension was observed. The association of nutritional status with the functional class showed that the majority of severely malnourished patients belonged to functional class IV/IV. The relationship is given in figure 1 and 2.

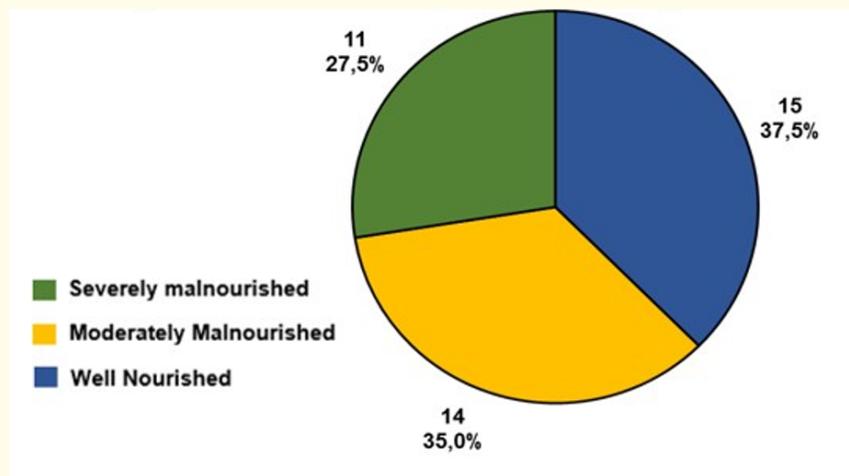


Figure 1: Distribution of patients according to nutritional diagnosis.

Functional	Well Nourished		Moderately Malnourished		Severely malnourished	
	n	%	n	%	n	%
I/IV	2	13,3	1	7,1	0	0,0
II/IV	7	46,7	5	35,7	3	27,3
III/IV	4	26,7	6	42,9	3	27,3
IV/IV	2	13,3	2	14,3	5	45,5

p = 0,377

Figure 2: Distribution of patients according to nutritional diagnosis and functional class.

Conclusion

The SGA has become a useful instrument for the treatment of hospital health in patients with HF, its use is proposed to obtain changes in the nutritional status of the early form and thus provide better comprehensive care.

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Volume 15 Issue 11 November 2020

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