

Albumin is a prognostic marker for COVID-19 infection

Luciana Sutanto¹

Since the first reported coronavirus disease 19 (COVID-19) case in Wuhan on December 31st, 2019, more than 2 years is still going on. (1) Outbreaks have occurred several times, resulting in increased morbidity and mortality. Various things and new findings for diagnosis and therapeutic efforts have been made. However, nutrition management has received less attention than the majority. Maybe because nutrition is not the initial treatment of therapy, nor is it an emergency therapy, it is often considered a level 2 medical treatment. In fact, nutritional management is the basis of the success of therapy. As the saying goes, “the last straw that breaks the camel’s back,” so nutrition is not the “last straw.” Guidelines for nutritional management for COVID-19 patients were published in the editorial of the journal *Clinical Nutrition* 2020. (2) Based on these recommendations, it is reported that ICU patients in a hospital can generally receive 20 kcal/kg body weight/day in the first 3 days of the treatment. (3)

The principle of nutritional management is a balance between nutritional intake and needs. Adequate intake of patients, in traditional times, one of which is assessed by blood albumin levels. Albumin as a marker of malnutrition remains controversial. This is explained by its relatively low specificity and the fact that an underlying disease such as inflammation exerts a significant influence. The European Society for Clinical Nutrition and Metabo-

lism (ESPEN) guidelines on clinical nutrition in intensive care units state that albumin and prealbumin levels are markers of good nutritional status, a low value indicating a response to inflammation (negative acute-phase protein). (4) Inflammation usually results in increased C-reactive protein (CRP) and hypoalbuminemia. Research by Mogensen et al (5) among 6518 patients concluded that albumin was a marker of conditions and reflects the inflammatory status. Gong et al’s (6) study of 189 critically ill patients with acute kidney injury (AKI) also came to the same conclusion that serum albumin levels did not have sufficient power to predict 90 days of in-hospital mortality of critically ill elderly patients with AKI, which is the relationship between malnutrition and poor prognosis. The study by Utariani et al (7) aims to determine the relationship between serum albumin levels and the risk of developing multiple organ dysfunction syndrome (MODS) in COVID-19 patients. The study results were that the initial albumin level of hospitalized patients with COVID-19 was an excellent marker for predicting the development of MODS. The initial measurements will be useful for further management; this research study supports other studies that concluded hypoalbuminemia is associated with poor prognosis in COVID-19 patients. It is hoped that this publication strengthens the understanding of albumin as a marker of inflammation, including infectious diseases such as COVID-19. (8)

Nutrition Department, Medical Faculty, Krida Wacana Christian University, Jakarta, Indonesia

Address for correspondence:

Luciana Sutanto
Nutrition Department, Medical Faculty, Krida Wacana Christian University
Jl. Arjuna Utara No. 6, Jakarta 11470, Indonesia
Email: lcsutanto@yahoo.com

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