

Utility of hypoalbuminemia as a predictor of mortality in abdominal sepsis

Utilidad de la hipoalbuminemia como predictor de mortalidad en sepsis abdominal

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Dear Editor,

We have read with great interest the original article by Saucedo-Moreno et al.¹ published in *Cirugía y Cirujanos*. This work reflects the desire to find a parameter that will help us classify patients with a higher risk of death and thus be able to identify early on an infectious process that merits more aggressive management.

Sepsis is one of the leading causes of death in critically ill patients despite the use of new antibiotics and resuscitation, so we congratulate the authors for their enthusiasm in conducting a prospective study of high scientific value for the benefit of patient care.

Knowing well that abdominal sepsis is a complex and heterogeneous disease process that is associated with or caused by a variety of microorganisms and sources of infection, the analysis of septic patients is of great value to achieve a better outcome in these cases.

Despite the small sample, it is a prospective study and its results are interesting. We believe that in addition to cases of liver disease, chronic renal disease and intravenous albumin transfusion, it is necessary to exclude from the study the patients with chronic pathologies that can modify the inflammatory-immune response, those with a history of cancer, immunosuppression, chronic organic insufficiencies, drug addictions, previous treatment with chemotherapy or radiotherapy, patients with

postoperative hospitalization of less than 24 hours, and patients who have undergone surgery for any other reason in a period of less than 90 days.

In a retrospective study of 155 patients performed at the Mexico General Hospital Dr. Eduardo Liceaga, where 2.8 mg/dl was taken as the cutoff point to identify patients with hypoalbuminemia, this did not prove to be related to mortality. However, it was observed that patients with a lower serum albumin value present a more severe infection, indicated by higher scores in APACHE II (*Acute Physiology And Chronic Health Evaluation II*), SOFA (*Sequential Organ Failure Assessment Score*) and Mannheim index, concluding that albumin is a marker of severity in abdominal sepsis².

A study recently published in Japan, which included 336 patients with sepsis and where ROC curves (*Receiver Operating Characteristic*) were used to determine the best discrimination point for hypoalbuminemia (2.8 mg/dl), reported that levels below this cutoff point were associated with higher scores in APACHE II, SOFA, and mortality³. The authors conclude that physicians should be acutely aware of this condition to provide immediate intensive treatment after admission of septic patients.

We must always bear in mind that a good marker should be used to diagnose a pathology and to assess its evolution, that is, as a prognostic factor. Under this premise, there is currently no marker that complies one

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hundred percent with these characteristics. This translates into increased mortality. Therefore, as the authors themselves recognize, it is necessary to continue conducting studies in the search for a predictor parameter of morbidity and mortality in sepsis.

Congratulations for the above mentioned work, since understanding the behavior of abdominal sepsis entails great complexity.

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Ethical disclosures

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Data confidentiality. The authors declare that they have followed their center's protocols on the publication of patient data.

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