

Javier Escrig-Sos^{a,*}, Antonio Lluca-Abella^b

^aServicio de Cirugía General y del Aparato Digestivo, Unidad Multidisciplinar de Cirugía Oncológica Abdominopélvica (UMCOAP), Hospital General Universitario de Castellón, Departamento de Medicina, Universitat Jaume I (UJI), Castellón, Spain

^bServicio de Ginecología y Obstetricia, Unidad Multidisciplinar de Cirugía Oncológica Abdominopélvica (UMCOAP), Hospital General Universitario de Castellón, Departamento de Medicina, Universitat Jaume I (UJI), Castellón, Spain

*Corresponding author.

E-mail address: javierescrig@telefonica.net (J. Escrig-Sos).

2173-5077/

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Should We Assume the New Definition of Sepsis in the Surgical Field?☆



¿Debemos asumir la nueva definición de sepsis en el campo de la cirugía?

To the Editor,

Recently, the Society of Critical Care Medicine (SCCM) and the European Society of Intensive Care Medicine (ESICM) reached a consensus that modified the definitions of sepsis and septic shock using a complex methodology based on 3 retrospective studies developed mainly in the United States, in addition to surveys that only used the Delphi method and a review of the literature.¹

The most striking of these new definitions is the exclusion of systemic inflammatory response syndrome (SIRS) from the concept of sepsis. This would now be defined by a change ≥ 2 in the Sepsis-related Organ Failure Assessment (SOFA) or a modified Quick SOFA (qSOFA) with known or probable infection.¹

The authors of the consensus mainly base this decision on a retrospective study in patients admitted to the ICU in situations of severe sepsis.² In these patients, one in 8 (12.5%) suffered from sepsis and multiple organ dysfunction without at least 2 SIRS criteria. However, it cannot be denied that in 7 out of every 8 cases (87.5%), at least 2 SIRS criteria were met, and were considered as such.³ While it is true that SIRS is not a perfect tool, its usefulness has been well established. Given the high mortality of sepsis, a highly sensitivity screening tool, such as SIRS, should be given priority over specificity, which is somewhat higher with SOFA.⁴ A directly proportional correlation between mortality and SIRS has been observed in several studies.^{5–8} In addition, its use, as well as the definitions of previous sepsis and associated interventions, have significantly reduced overall mortality due to sepsis.^{2,6,9–12}

The new consensus bases the definition of sepsis on organ dysfunction. The SOFA scale was designed to objectively identify established organ dysfunction in the context of sepsis

in critical patients,¹¹ and this score does not include, for example, coagulopathy, one of the most frequent organ dysfunctions in septic patients.^{7,11} Its use, despite being habitual in intensive care units, is anecdotal in other contexts.⁴ Its lack of application outside the intensive care unit, such as surgical emergencies or surgery units, where cases of sepsis are usually diagnosed at their origin, as well as the dependence on these definitions of organ failure, a situation that occurs in severe sepsis and would prevent an early diagnosis, do not seem to advise its use in our setting.

This is why we concur with other authors who have also expressed their concern about this paradigm shift.^{3,4} We believe that substituting a definition of sepsis—which, coupled with the homogenization of intervention packages, has led to an overall decline in mortality and lowered severe sepsis rates by 7%–16% and septic shock by 20%–25%,^{3,9,11,12} and is widely extended and validated (higher precocity with lower mortality)—for another marginally used definition, without prospective studies in different types of patients, settings and regions to support this change, is a risky endeavor to which our patients should not be exposed.

“Good clinical care is grounded in common sense and carefully considered intervention, not in esoteric renderings of biology.”—John Marshall⁸

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☆ Please cite this article as: Segura-Sampedro JJ, Morales-Soriano R, González-Argente X, Borges M. ¿Debemos asumir la nueva definición de sepsis en el campo de la cirugía? *Cir Esp*. 2017;95:415–416.

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Juan José Segura-Sampedro^{a,*}, Rafael Morales-Soriano^a,
Xavier González-Argente^a, Marcio Borges^b

^aDepartamento de Cirugía General y Digestiva, Hospital Universitario Son Espases, Grupo de investigación de Enfermedad Oncológica Peritoneal en el Instituto de Investigación Sanitaria de Palma (IdISPa), Palma de Mallorca, Spain

^bUnidad de Sepsis, Hospital Son Llatzer, Palma de Mallorca, Spain

*Corresponding author.

E-mail address: segusamjj@gmail.com (J.J. Segura-Sampedro).

2173-5077/

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