

# Sepsis hyperglycemia in the ICU: From the mechanism to the clinic

## Hiperglicemia por sepsis: Del mecanismo a la clínica

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© 2018, Sociedad Medica de Santiago. All rights reserved. Stress hyperglycemia is frequently diagnosed in septic patients in critical care units (ICU) and it is associated with greater illness severity and higher morbimortality rates. In response to an acute injury, high levels of counterregulatory hormones such as glucocorticoids and catecholamines are released causing increased hepatic gluconeogenesis and insulin resistance. Furthermore, during sepsis, proinflammatory cytokines also participate in the pathogenesis of this phenomenon. Septic patients represent a subtype of the critical ill patients in the ICU: this metabolic disarrangement management strategies and insulin therapy recommendations had been inconsistent. In this article, we describe the pathophysiological mechanisms of stress hyperglycemia in critical patients including the action of hormones, inflammatory cytokines and tissue resistance to insulin. In addition, we analyzed the main published studies for the treatment o