

## PANCREATIC STONE PROTEIN: A NEW BIOMARKER IN SEPSIS

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Pancreatic stone protein (PSP) is secreted by the pancreas and rises in response to stress induced by systemic infection and sepsis. PSP levels start to increase before the development of clinical signs and symptoms of sepsis. PSP could be useful in the identification of patients with worse outcomes. Pancreatic stone protein performance in the diagnosis of sepsis is, at least, comparable to other biomarkers. The role of PSP in the immune and inflammatory response to infection prompted its identification as a potential biomarker of infection and sepsis. Sepsis is a life-threatening syndrome characterized by a dysregulated host response to an infection that may evolve rapidly into septic shock and multiple organ failure. Management of sepsis relies on the early recognition and diagnosis of infection and the providing of adequate and prompt antibiotic therapy and organ support. A novel protein biomarker, the pancreatic stone protein (PSP), has recently been studied as a biomarker of sepsis and the available evidence suggests that it has a higher diagnostic performance for the identification of infection than the most used available biomarkers and adds prognostic value. PSP can be useful for the early diagnosis of infection and for the triage of patients based on the risk of mortality. The diagnostic ability of PSP may be relevant not only through its sensitivity for timely diagnosis, but also through its negative predictive value, which can lead to a reduction in inappropriate antibiotic prescriptions, which in compliance with antibiotic stewardship strategies. The possibility of performing serial assessments of PSP in ICUs would allow for a sentinel effect of infection in patients hospitalized for non-infectious causes and/or monitoring infection response to antibiotic therapy. The role of pancreatic stone protein in clinical practice is still to be determined.

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