

New test to rapidly diagnose sepsis

May 17 2017

Researchers have developed a test that can rapidly and reliably diagnose sepsis, a potentially life-threatening complication of bacterial infections.

Rapid diagnosis of sepsis in hospitalized patients is crucial because in severe cases, there is an average 7.6% decrease in survival rate per hour from the onset of [low blood pressure](#) without effective antimicrobial treatment. Early identification of a pathogen increases the chance of targeting the correct agent and may avoid misuse of antibiotics.

In a *Journal of Clinical Laboratory Analysis* study, investigators describe what is called a TaqMan-Based Multiplex real-time PCR detection system, which allowed for rapid detection of 10 of the most frequent bacterial pathogens from blood samples.

"Interestingly, pathogens in some blood culture-negative cases of sepsis patients were still detected in this study. We speculate that the residual DNA fragments of the bacteria might be detected by this system even if they were destroyed by [antibacterial drugs](#) or the immune system," said Dr. Bing Zhang, senior author of the study.

More information: Chang-Feng Liu et al, Rapid diagnosis of sepsis with TaqMan-Based multiplex real-time PCR, *Journal of Clinical Laboratory Analysis* (2017). [DOI: 10.1002/jcla.22256](https://doi.org/10.1002/jcla.22256)

Provided by Wiley

Citation: New test to rapidly diagnose sepsis (2017, May 17) retrieved 9 April 2024 from <https://medicalxpress.com/news/2017-05-rapidly-sepsis.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.