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EARLY DIAGNOSIS AND MANAGEMENT OF SEPSIS IN THE EMERGENCY DEPARTMENT

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Sepsis is a life-threatening medical emergency that develops as a result of a dysregulated host response to infection and is characterized by organ dysfunction. Its progression may occur rapidly, within several hours, leading to septic shock and multiple organ failure. Early recognition of sepsis in the emergency department remains a significant challenge, as the initial clinical manifestations are often nonspecific. Therefore, timely diagnosis and prompt initiation of appropriate treatment are critical for improving clinical outcomes.

This paper reviews current approaches to early sepsis diagnosis and management in the emergency department, assesses the significance of early clinical and laboratory indicators, and determines the role of timely therapeutic interventions in improving patient outcomes. We reviewed contemporary scientific literature and international clinical guidelines on sepsis. Clinical and laboratory parameters used for the early recognition of sepsis were analyzed, including blood pressure, heart rate, respiratory rate, body temperature, level of consciousness, urine output, lactate levels, and signs of organ dysfunction. The importance of antimicrobial therapy, intravenous fluid administration, vasopressor support, and source control was also evaluated

The analysis showed that early sepsis identification requires systematic, repeated clinical assessment. The use of a single screening criterion or tool may be insufficient. Particular importance should be placed on the early detection of tissue hypoperfusion and organ dysfunction, assessment of lactate levels, and dynamic monitoring of hemodynamic status. In patients with suspected sepsis, rapid identification of the probable source of infection, collection of appropriate microbiological specimens, and timely initiation of antimicrobial therapy are key components of management. In the presence of hypotension and hypoperfusion, fluid therapy should be individually assessed and, when clinically indicated, vasopressor support should be initiated promptly.

The effectiveness of sepsis management in the emergency department largely depends on early recognition, rapid diagnostic assessment, and timely therapeutic intervention. The diagnosis of

sepsis should be based on a comprehensive assessment of the patient's clinical condition, organ dysfunction, and laboratory findings. The implementation of standardized early assessment and management algorithms, dynamic monitoring of the patient's condition, and timely source control are essential components of effective sepsis management in the emergency department.

Keywords: Sepsis, Septic Shock, Lactate Levels, Antimicrobial Therapy, Hemodynamic Support.