

Challenges in Sepsis Diagnosis

A diagnosis of sepsis is often missed because the presenting symptoms can mimic many other clinical presentations. The patient's vital signs or laboratory abnormalities can be attributed to other etiologies, but the diagnosed condition is often caused by an underlying infection. A delay in the identification of sepsis leads to a delay in the initiation of treatment, which can lead to poor patient outcomes.

Why is sepsis hard to identify?

- Definitions can be confusing, inconsistent, complex and evolving
- Multiple organ dysfunction may require secondary work-ups
- Diagnosis is based on a set of criteria, which can be related to many other diseases or medical conditions
- There is not a test specific to the diagnosis of sepsis

Systemic Inflammatory Response Syndrome (SIRS) or organ dysfunction due to other causes:

- Chronic conditions like pancreatitis, COPD, heart failure, kidney disease
- Medical treatment or drug regimen
- Pain, chronic or acute
- Surgery, trauma or burns
- Drugs or withdrawal from drugs

What is sepsis commonly mistaken for?

- Diabetic Ketoacidosis (DKA)
 - Patients present with acidosis, reactive leukocytosis and dehydration – triggered by uncontrolled diabetes, infection, trauma or medications
 - Clinical presentation may include shortness of breath, weakness/fatigue, tachycardia, nausea/vomiting, confusion
- Stroke
 - 23 percent of sepsis patients present with altered mental status, many with limited recall of physical history
 - Clinical presentation may include headache, confusion, difficulty speaking, non-focal weakness/dizziness
- Trauma
 - Patients present with abnormal vital signs due to pain, stress and/or shock – falls can be the result of an advanced infectious state
 - Clinical presentation may include fracture or bruising, tachycardia, tachypnea, hypotension, altered mental status
- Abdominal Pain
 - Patients present with tachycardia and tachypnea without fever
 - Clinical presentation may include nausea/vomiting, tachycardia, tachypnea
- Pregnancy
 - Patients in advanced stages of pregnancy present with tachypnea, mild tachycardia and leukocytosis
 - Clinical presentation may include abnormal discharge, pain, prolonged rupture of membranes, recent miscarriage or cesarean section

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