



Lactate in Severe Sepsis and Septic Shock – a quick user's guide

Obtaining serum Lactate is essential to identifying tissue hypoperfusion in patients who are not yet hypotensive but who are at risk for septic shock.

A raised Lactate has prognostic value for survival, especially the rate of clearance. There are limitations to its use but in the ED the following should be used as a diagnostic guide in septic patients:

Initial Lactate

0-2	Normal
>2	If the criteria for sepsis are already met, this indicates Severe Sepsis
>4	If the criteria for sepsis are already met, this could indicate Septic Shock if it does not respond to fluids.

After the initial sepsis care duties have been performed (oxygen, fluids, swabs & cultures, antibiotics, blood tests, urinary catheter for hourly U/O) the Lactate should be repeated:

Repeat Lactate

0-2	Normal
>2	If initial Lactate was >2 but <4 then this is Severe Sepsis unless the BP is low (see below) If initial Lactate was >4 then this indicates Severe Sepsis
>4	Septic Shock (NB if the blood pressure was never low then this is called ' Cryptic Shock ').

If, despite initial resuscitation (oxygen, fluids, swabs & cultures, antibiotics, blood tests and urinary catheter for hourly U/O), the BP remains low (SBP<90, MAP<65) then this is **Septic Shock** irrespective of the Lactate.