

10 Clinical Insights for Solicitors in *Sepsis Negligence Claims*

Sepsis is a time-critical medical emergency in which an infection triggers a potentially life-threatening response, leading to organ dysfunction and, in severe cases, multi-organ failure.

For solicitors investigating clinical negligence claims, the difficulty often lies in establishing when deterioration should have been recognised, whether treatment and escalation were appropriate, and whether earlier intervention would have altered the outcome.

Drawing on her experience as a medico-legal expert witness since 2009 and a Consultant in Acute Medicine since 2011, Dr Elora Mukherjee provides clinical insight into the challenges of recognising and managing sepsis. Her expertise encompasses the assessment and treatment of acutely unwell adult patients, including the critical first 24-72 hours of hospital admission, when decisions about investigation, monitoring, treatment and escalation can significantly influence patient outcomes.

Sepsis can develop rapidly, but the earliest clinical signs are not always obvious. Patients may initially present with non-specific symptoms, while blood results and observations may not fully reflect the seriousness of their condition.

Understanding how these clinical decisions interact can help solicitors identify potential breaches of duty, distinguish clinical errors from unavoidable deterioration and determine where expert evidence is required.

*This eBook has been produced by INNEG and is based on key clinical insights shared during our webinar, **Sepsis Negligence Claims**, presented by Dr Elora Mukherjee, Consultant in General and Acute Medicine*

1 - Sepsis May Be Present Without the Expected Clinical Signs

One of the difficulties in recognising sepsis is that patients do not all demonstrate the same physiological response.

Although fever, raised inflammatory markers, increased heart rate and low blood pressure may indicate infection or deterioration, their absence does not necessarily exclude sepsis.

Presentation can be particularly difficult to interpret in:

- **Older or frail patients**, who may not develop a significant fever or raised inflammatory markers.
- **Immunocompromised patients**, whose immune response may be reduced.

- **Young, otherwise healthy patients**, who may maintain relatively normal observations through physiological compensation before deteriorating rapidly.
- **Patients who have already received antibiotics**, whose inflammatory markers and culture results may be affected by previous treatment.

Confusion, unexplained deterioration and falling blood pressure may provide important clinical clues even where conventional indicators appear reassuring.

Solicitors should consider whether the treating clinicians assessed the patient's overall clinical presentation rather than relying on an isolated normal observation or blood result.

2 - NEWS Scores and Lactate Trends Can Reveal Missed Deterioration

The National Early Warning Score (NEWS) provides a structured means of assessing physiological deterioration and identifying patients who may require urgent review.

However, the value of NEWS lies not only in an individual score but also in how observations change over time.

A patient whose NEWS score is rising despite treatment may require further investigation, senior review or escalation to a higher level of care.

Lactate is another important indicator. Elevated lactate can suggest impaired tissue perfusion and may be associated with severe illness, particularly when accompanied by persistent hypotension.

A raised lactate level should therefore be considered alongside the patient's clinical condition and subsequent results.

What solicitors should examine:

- Were NEWS assessments completed and documented?
- Did observations show a worsening trend?
- Was lactate measured and, where appropriate, repeated?
- Were abnormal results recognised and acted upon?
- Did the clinical response reflect the patient's deterioration?

The failure to recognise a rising lactate or worsening NEWS score may represent an important issue for expert consideration.

3 - The Sepsis Six Provides a Framework for Reviewing Initial Treatment

When sepsis is suspected, the Sepsis Six care bundle provides a structured approach to early investigation, treatment and monitoring.

Its six components are:

- 1.Administer oxygen where indicated to support adequate oxygenation.
- 2.Take blood cultures to help identify the responsible organism.
- 3.Administer intravenous antibiotics promptly, with treatment selected according to the clinical circumstances.
- 4.Give intravenous fluids where appropriate to support circulation.
- 5.Measure lactate to assess the patient's physiological condition.
- 6.Monitor urine output as an indicator of fluid balance and organ function.

In potential negligence claims, the issue is not simply whether a sepsis bundle was documented as completed.

It is also necessary to consider whether the treatment was appropriate, timely and followed by adequate reassessment.

For example, intravenous fluids may be necessary to address hypotension, but excessive administration can also cause harm, particularly when organ function is deteriorating.

The timing of antibiotics, blood cultures, fluid administration and reassessment should be examined together.

A failure to complete an individual intervention does not automatically establish that the patient's outcome would have been different.

4 - Negative Blood Cultures Do Not Necessarily Exclude Sepsis

Microbiological evidence can help clinicians identify an infection and select appropriate antimicrobial treatment. However, negative blood cultures do not always mean that infection was absent.

Patients may have received antibiotics before hospital admission, potentially reducing the likelihood of recovering an organism from subsequent cultures.

Similarly, inflammatory markers such as C-reactive protein (CRP) may not rise immediately.

A normal early CRP result therefore needs to be interpreted in the context of the patient's symptoms, observations and other investigations.

White cell counts can also be informative, although the pattern may vary depending on the

underlying illness and the patient's immune response.

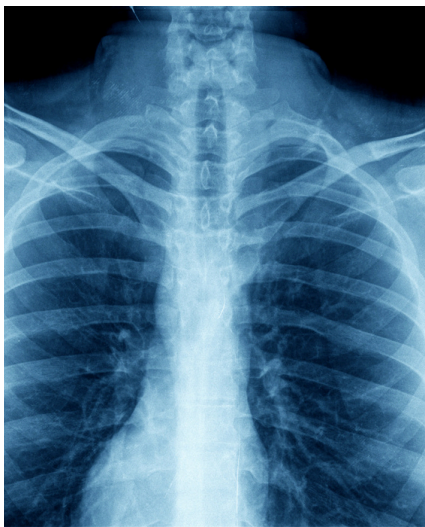
Where infection was suspected despite negative or inconclusive results, consider whether:

- Clinicians continued to assess the patient's symptoms and physiological observations.
- Repeat blood tests or additional investigations were appropriate.
- Previous antibiotic treatment was recognised.
- Alternative sources of infection were considered.
- Treatment decisions were reviewed as further clinical information became available.

A negative test result should not be considered in isolation when examining whether sepsis was appropriately investigated.

5 - Failure to Identify the Source of Infection Can Delay Effective Treatment

Recognising that a patient is septic is only part of the clinical challenge. Identifying the source of infection is also important for directing treatment.



Initial investigations may include chest X-rays, urine testing, blood cultures, ultrasound or CT imaging.

However, where the patient continues to deteriorate, further investigations may be required.

Potentially overlooked sources include:

Skin and pressure ulcers

A patient may have cellulitis, an infected pressure ulcer or another concealed skin infection. A thorough examination may be particularly important where the patient is confused or unable to describe symptoms.

Bone and spinal infection

Osteomyelitis or discitis may require further imaging, including MRI, where clinically suspected.



Central nervous system infection

Persistent confusion or neurological symptoms may require investigation for meningitis or encephalitis, including consideration of lumbar puncture where appropriate.

Infective endocarditis

An infection involving the heart valves may cause prolonged or recurrent septic symptoms. Echocardiography, including transoesophageal echocardiography, may be necessary where this is suspected.

Where treatment failed to produce the expected improvement, solicitors should consider whether the original diagnosis was reconsidered and whether further investigations were undertaken within an appropriate timeframe.

6 - Escalation Decisions Become Critical During the First 72 Hours

Patients admitted with suspected sepsis may initially receive treatment in an emergency department before transfer to an acute medical unit.

Acute medicine commonly manages the early phase of adult medical admissions, including assessment, treatment, stabilisation and decisions about further care.

Where a patient's condition deteriorates, escalation may be required to a high dependency unit (HDU) or intensive care unit (ICU).

The decision should take account of the patient's physiological condition, response to treatment and suitability for organ support.

Important considerations include:

- Whether deterioration was recognised early enough.
- Whether senior clinical review was obtained.
- Whether critical care outreach or intensive care specialists were consulted.
- Whether escalation occurred while there was still an opportunity for effective intervention.
- Whether treatment escalation plans and ceilings of care were appropriately considered and documented.

Not every patient will be suitable for intensive care, and deterioration does not necessarily indicate negligent management.

However, the reasoning behind escalation decisions and the timing of those decisions can be significant when investigating a potential claim.

7 - Treatment Must Be Reassessed When Patients Fail to Improve

The initial administration of antibiotics and fluids does not mark the end of sepsis management.

Where patients continue to deteriorate over the following 48-72 hours, clinicians may need to reconsider both the diagnosis and the treatment strategy.

This can include reviewing microbiological results, seeking specialist advice, reconsidering the infection source and assessing whether the patient requires higher levels of organ support.

Antibiotic treatment

Empirical antibiotics may be started before the responsible organism has been identified.

As microbiological information becomes available, treatment may need to be adjusted to account for the organism

involved and any antimicrobial resistance.

In a negligence investigation, it may be necessary to establish which local antimicrobial guidelines applied at the time of treatment.

Fluid management

Intravenous fluids may support circulation in a hypotensive patient, but excessive administration can contribute to complications, including fluid overload and respiratory deterioration.

Solicitors should look beyond whether treatment was commenced and examine whether its effectiveness was monitored.

Where deterioration continued, the key question is whether appropriate reassessment and further intervention took place.

8 - Three Clinical Scenarios Illustrating Potential Negligence Issues

The following clinical scenarios demonstrate how early presentation, diagnostic decisions and treatment response may affect the assessment of a potential claim.

Case One: Severe Deterioration Following a Suspected Urinary Tract Infection

A 56-year-old woman had experienced urinary symptoms for approximately one week and had received antibiotics from her GP.

Despite treatment, she developed confusion, vomiting and rigors.

On hospital assessment, she was hypotensive, tachycardic, feverish and confused, with a NEWS score of 14. Blood tests indicated renal impairment, elevated inflammatory markers and raised lactate.

These findings suggested severe physiological deterioration requiring urgent treatment, close monitoring and early consideration of intensive care involvement.

Potential medico-legal issues:

- Recognition of the patient's critical condition.
- Timeliness of antibiotic treatment.
- Monitoring of NEWS and lactate.
- Appropriateness of intravenous fluid administration.
- Timing of senior and critical care review.

This scenario also demonstrates the importance of separating breach of duty from causation. A delay or error in management does not necessarily establish that the patient suffered an additional injury as a result.

Case Two: Malaria Initially Suspected to Be a Urinary Infection

A 56-year-old man presented with fever, rigors, headache, body aches and red-coloured urine.

Initial assessment suggested a possible urinary infection, but blood investigations demonstrated abnormalities including a reduced platelet count and disturbed clotting.

Further questioning established that he had recently travelled to Ghana.

This information prompted consideration of malaria, and the patient received appropriate treatment and recovered.

Potential medico-legal issues:

- Whether an adequate travel history was obtained.
- Whether clinical findings supported the initial diagnosis.
- Whether abnormal blood results prompted reconsideration.

- Whether a delay in diagnosis resulted in additional harm.

Although recognition was initially delayed, appropriate treatment was subsequently provided and the patient recovered. The case illustrates why an identifiable diagnostic error must be considered separately from its consequences.



Case Three: Biliary Sepsis Mistaken for a Urinary Infection

A 64-year-old woman with diabetes, hypertension and gallstones presented with fever, rigors and right upper abdominal pain.

She received antibiotics and fluids in a same day emergency care setting for a presumed urinary infection. Following initial stabilisation, she was discharged.

The underlying diagnosis was cholecystitis, rather than the suspected urinary infection.

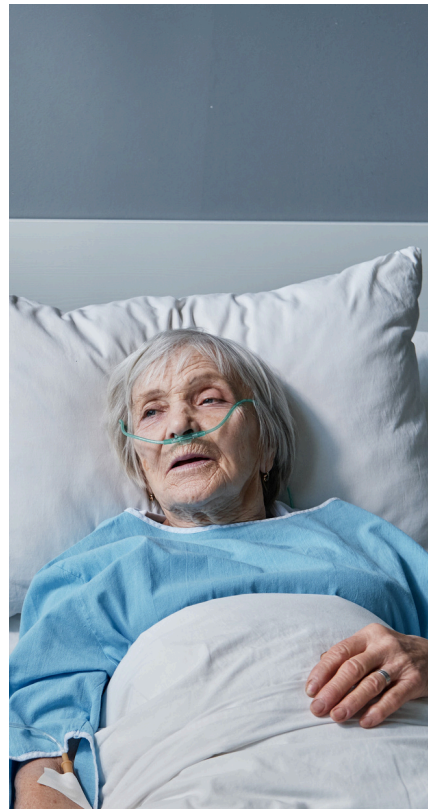
This scenario highlights the risks of continuing with an incorrect initial diagnosis, particularly where subsequent reviews involve different clinicians.

Potential medico-legal issues:

- Whether the presenting abdominal symptoms were adequately investigated.
- Whether the initial diagnosis was reconsidered.
- Whether handovers communicated outstanding concerns.

- Whether follow-up and safety-netting advice were appropriate.
- Whether deterioration after discharge should have prompted urgent reassessment or admission.

The central issue is whether clinicians responded appropriately to the information available at each stage of care.



9 - Breach of Duty and Causation Must Be Considered Separately

One of the most important distinctions in sepsis negligence claims is the difference between identifying a failure in care and establishing that the failure caused harm.

Potential breaches may involve delayed diagnosis, failure to monitor deterioration, inappropriate antibiotic treatment, inadequate investigation or delayed escalation.

However, sepsis can progress despite appropriate treatment.

Some patients have limited physiological reserve, while others may develop overwhelming infection or multi-organ failure even where timely intervention has occurred.

The presence of an adverse outcome does not, by itself, establish negligence.

Solicitors should consider:

- What was the patient's condition at the time of the alleged breach?
- What treatment or investigation should have occurred?
- Was there a clinically meaningful opportunity to intervene earlier?
- How did the patient respond to the treatment actually provided?
- Would earlier or different management probably have altered the outcome?

These questions require careful consideration of the clinical chronology and appropriate expert evidence.

The central distinction is whether the patient deteriorated because of a failure in care, or despite appropriate clinical management.

10 - Selecting the Right Expert for a Sepsis Claim

Sepsis claims may involve several different stages of care, making the selection of an appropriately experienced medical expert particularly important.

The relevant discipline will depend on where the alleged breach occurred and which clinical decisions require assessment.

Emergency Medicine

Where concerns relate to initial hospital presentation, triage, emergency assessment and treatment decisions.

Acute Medicine

Where the claim concerns the first 24-72 hours of an adult medical admission, including inpatient assessment, treatment, monitoring, deterioration and decisions about escalation.

Intensive Care Medicine

Where the relevant issues involve critical care admission, advanced organ support or management within intensive care.

Medical Microbiology

Where questions arise regarding organism identification, antimicrobial selection, resistance or specialist advice on infection management.

Some cases may require evidence from more than one discipline, particularly where alleged failures extend across different departments or phases of treatment.

Identifying the precise clinical question before instruction helps ensure that the expert's experience is appropriate to the issues in dispute.

Conclusion

Sepsis negligence claims frequently involve a sequence of clinical decisions rather than a single identifiable error.

Early symptoms may be subtle, investigations may initially be inconclusive, and deterioration can occur despite treatment.

For solicitors, a detailed examination of the patient's clinical chronology is therefore essential.

The most important areas to consider include the initial recognition of infection, changes in observations and lactate, the timeliness of treatment, investigation of the underlying source, reassessment and escalation decisions.

Equally important is establishing whether any identified failure resulted in an avoidable deterioration or additional harm.

A well-defined clinical chronology, supported by appropriately matched expert evidence, can help distinguish potentially negligent care from the recognised risks of severe infection.



About the Author

Consultant in General and Acute Medicine

Dr Elora Mukherjee has been a Consultant in Acute Medicine since 2011 and has provided medico-legal expert evidence since 2009.

Her clinical experience includes the assessment and management of acutely unwell adult patients, including the initial 24-72 hours of medical admission, clinical deterioration, treatment decisions and escalation of care.

Her medico-legal work includes clinical negligence matters involving general and acute medicine.



Access over 13,000 specialist expert witnesses

INNEG can provide experts across a range of disciplines relevant to sepsis negligence claims, including:

- Emergency Medicine - advising on initial assessment, recognition of sepsis, investigations and treatment in the emergency department.
- Acute Medicine - assessing the management of acute illness, recognition of deterioration and escalation of care.
- Intensive Care Medicine - advising on critical care referral, organ support and the management of severe sepsis and septic shock.
- Medical Microbiology - assessing microbiological investigations, interpretation of results and the choice and timing of antimicrobial treatment.

In sepsis negligence claims, the central issue is often not simply whether infection was recognised or treatment was delayed, but whether earlier investigation, appropriate treatment or timely escalation would probably have altered the patient's deterioration, prognosis or long-term outcome.

Our Analysts can help identify the appropriate expert for the specific clinical issues involved, including where evidence from multiple disciplines may be required.

[Search our expert panel here.](#)