

Source Control and Sepsis Management



Source control is important in the treatment of sepsis and septic shock. Lack or delay of source control can result in worse outcomes for patients.

The 2021 Surviving Sepsis Campaign guidelines recommend identifying the anatomical source of infection that requires source control and implementing it as soon as possible. However, adequate source control is difficult to define, and its optimal timing is difficult to study. In addition, methods for source control are not standardised.

The primary aim of source control is to eliminate the source of infection and control contamination. Source control also helps restore premorbid anatomy and function. However, there is a need to highlight the relevance of source control in different infections and use a multidisciplinary approach when choosing the appropriate methodology.

Identifying the need for source control is linked to the diagnostic process when a patient presents with sepsis or septic shock. After identifying the source of infection, it is also necessary to evaluate the need for source control and screening for sources of infection that may require source control.



Source control is already considered important in patients with abdominal infections. However, it is also important in patients with sepsis or septic shock. Procedures for source control should be tailored to the site of infection, the extent of the infection, and the degree of derangement of patient physiology. The goal should be to always choose the least invasive procedure for maximal source control and avoid long-term damage or disability. Patients with sepsis are prone to complications; hence a temprorising strategy based on the patient's physiology should be used. Persistent infection from incomplete source control can result in unresolved sepsis and septic shock. If this happens, a more aggressive approach may be required, and there should be no further delays.

If source control fails, it may be due to ongoing infection, incomplete source control, contamination, or a combination of these factors. It could also be due to failure of the source control intervention and/or a lack of effective antimicrobial therapy. Poor penetration at the site of infection or inappropriate antimicrobial selection can result in ongoing bacterial growth and recurrent infection. Hence, the importance of antimicrobial therapy and source control in sepsis cannot be understated. At the same time, it is important to use a more conservative approach if there is a risk of causing more damage when trying to maximise source control.

Failed source control is difficult to diagnose. Some biomarkers can help diagnose, but there is no definite diagnostic tool available. In most cases, the diagnostic is made based on a lack of clinical improvement in the patient or signs and symptoms of inflammation. Therefore, monitoring the success of source control if a patient does not improve is very important.

Source control can determine the outcome in patients with sepsis and septic shock. However, interventions should be tailored to the patient's condition and implemented by a multidisciplinary team. The goal should be to avoid additional harm while maximising the efficacy of the intervention.

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