

The Intersection of Obesity and Sepsis: An Integrative Review of the Literature

Sepsis and obesity are each global health concerns with high morbidity and mortality rates. When taken together one might expect a perfect storm in which patient outcomes are exponentially worse than with either diagnosis individually. However, in the “obesity paradox” obese individuals with sepsis survive at higher rates than non-obese individuals. Adipose tissue is an active immune and endocrine organ, when present in excess it provides a protective effect due to alterations in the host response to inflammation. Given that the newest sepsis guidelines indicate that a dysregulated host response is responsible for organ failure and death in sepsis it is important to understand the protective effect of adipose tissue in order to leverage its benefits for the larger population. This systematic integrative review of the literature will summarize the current state of the science and synthesize findings to describe future directions for research. The pathophysiology behind the “obesity paradox” will be described along with theoretical implications for future studies.