Foreword Severe Infections: Not for the Faint of Heart





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Infections remain one of the top reasons that patients get admitted to the hospital, and the rate of infection-related hospitalizations has been increasing by approximately 5% per year over recent decades.¹ While some of these infections (eg, pneumonia or cellulitis) might seem routine, they can sometimes rapidly transform into systemic-devastating diseases. Clinicians strive to accurately identify and optimally treat both common and severe infections; yet it is the severe infection that brings us the most concern for our patients' well-being and the most angst as clinicians as we attempt to assure swift and appropriate therapies.

This issue of *Medical Clinics of North America* offers a collection of articles, expertly crafted by Dr Jennifer Hanrahan and colleagues, guiding outpatient and inpatient clinicians in the evaluation and management of severe infections. This compendium reviews the key aspects of diagnosis, management, and prognosis of many acute, severe infectious conditions, often requiring hospitalization and management by inpatient clinicians with support from infectious disease colleagues.

My mind has categorized the included articles into five severe infection topic areas impacting patients and clinicians:

- 1. When common infectious diseases become severe infections (pneumonia, tuberculosis, *Clostridium difficile* infection, skin and soft tissue infections, sexually transmitted infections)
- When bugs get into high-risk or difficulty-to-penetrate locations (encephalitis, meningitis, endocarditis, prosthetic joint infections, vertebral osteomyelitis, and spinal epidural abscess)
- 3. When near-eradicated bugs re-emerge (measles)
- 4. When bugs evade drugs (multidrug-resistant infections)

 When patients visit bugs and come home (severe infections in returning travelers, including malaria, dengue, salmonella, chikungunya, zika, leptospirosis, yellow fever, traveler's diarrhea, hepatitis A, hepatitis E, schistosomiasis, amebiasis, leishmaniasis, and others)

While some of the described conditions have recently published evidence and guidelines for newer therapeutic efficacy (eg, corticosteroids for severe pneumonia),^{2–4} others remain elusively challenging to manage effectively (eg, fulminant *C difficile* infection). These articles will help clinicians best assimilate and actuate the best evidence to optimally identify and manage these severe infections when presenting in our patients.

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