

Northwestern Memorial Hospital

SUGGESTED EMPIRIC ANTIMICROBIAL THERAPY BY SITE OF INFECTION

Empiric antimicrobial guidelines are based on the most likely organisms responsible for infection, NMH susceptibilities, and prevalence of resistant organisms. Therapy may need to be adjusted once identification and susceptibility are determined.

Previous antimicrobial therapy may affect the susceptibility of organisms that subsequently cause infection. Close attention should be given to courses of antimicrobial therapy administered to patients in the recent past. In many cases, obtaining the appropriate specimen(s) before antibiotics are started is critical to successful outcomes of an infectious disease. Alterations in empiric antimicrobial therapy may be required.

Anatomic site /diagnosis	Common Pathogens	Preferred therapy	Alternative**	Comments
HEART				
Endocarditis		Refer to guidelines		ID consult recommended. Refer to AHA guidelines: IDSA/AHA Endocarditis Management Guidelines
VASCULAR				
Catheter-associated bloodstream infection	Coagulase-negative staphylococci, <i>S. aureus</i> (MSSA and MRSA); Enterococcus spp.	Remove line Vancomycin If high suspicion for Gram-negative: add cefepime		May be able to salvage a long term line if infection is due to <i>S. epidermidis</i> AND no evidence of tunnel infection or complicated blood stream infection. IDSA Catheter-Related Bloodstream Infection Guidelines

** Severe allergy to Preferred Therapy only

Impaired host catheter-associated bloodstream infection	<i>S. epidermidis</i> , other coagulase-negative staphylococci, <i>S. aureus</i> (MSSA and MRSA), Enterobacteriaceae, <i>Pseudomonas aeruginosa</i> , <i>Candida</i> species, VRE	vancomycin + cefepime +/- amikacin		Consider short course of amikacin in addition to other antibiotics if patient is clinically unstable. Consider coverage for vancomycin-resistant Enterococcus (VRE) if patient is colonized with this organism (replace vancomycin with linezolid or daptomycin). If hemodynamically unstable, consider adding fungal coverage (micafungin or fluconazole). IDSA Catheter-Related Bloodstream Infection Guidelines
Hyperalimentation-associated line infection	As with impaired host line infection, <i>Candida</i> spp. is more common	Add micafungin or fluconazole in addition to Above recommendations based on anatomic site/diagnosis		Consider micafungin rather than fluconazole if patient has been receiving fluconazole in the month prior to fungemia.
Documented candidemia		micafungin if neutropenic, critically ill, or prior exposure to fluconazole in past month	fluconazole	Consider micafungin rather than fluconazole if patient has been receiving fluconazole in the month prior to fungemia or if the patient is critically ill. Review patient's recent microbiology for any recent history of resistant <i>Candida</i> spp. IDSA Candidiasis Guidelines

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