Obtain Infectious Diseases consult regardless of colony count or presumed source
Order follow up blood cultures 2-4 days after initial blood culture
Obtain transesophageal echocardiogram (TEE) unless contraindicated; obtain transthoracic echocardiogram (TTE) otherwise
Remove all indwelling central lines unless absolutely contraindicated

First Line:
- Vancomycin\(^1\) 15 mg/kg IV every 12 hours (adjust dose based on levels) \(\text{or}\)
- Daptomycin\(^1,2\) 8 mg/kg IV daily

Second Line\(^3\):
- Ceftaroline\(^1\) 600 mg IV every 8 hours
- Telavancin\(^1\) 7.5 mg/kg (maximum 750 mg) IV daily

Methicillin resistant? 
Yes
- MRSA bacteremia

No
- MSSA bacteremia

Complicated bacteremia\(^6\)?
Yes
- Therapy duration: 4-6 weeks IV therapy from first negative blood culture

No
- Therapy duration: 2 weeks IV therapy from first negative blood culture

Note:
- Clinical assessment to identify source and extent of infection
- Elimination and/or debridement of other sites of infection
- Renal adjustment required as appropriate—refer to Antimicrobial Stewardship inside page for dosing recommendations

MRSA = methicillin-resistant *Staphylococcus aureus*
MSSA = methicillin-sensitive *Staphylococcus aureus*

\(^1\) Renal adjustment required as appropriate—refer to Antimicrobial Stewardship inside page for dosing recommendations

\(^2\) Beta-lactam choice: Other beta lactam agents should not be considered to be interchangeable with nafcillin or cefazolin. In cases where an alternative beta-lactam is needed (e.g., concomitant infection), addition of nafcillin or cefazolin should be considered on a case-by-case basis.

\(^3\) Combination therapy with two or more active anti-MRSA agents may be considered on a case-by-case basis

\(^4\) All MSSA are sensitive to cefazolin; susceptibility testing is not independently performed

\(^5\) Criteria for complicated bacteremia
- Endocarditis verified upon echocardiography
- Evidence of metastatic sites of infection
- Patient has an implanted device
- Persistent bacteremia after 2-4 days

\(^6\) Further information regarding MRSA bacteremia

http://inside.mdanderson.org/departments/antimicrobial-stewardship-program/resources.html
Staphylococcus aureus Bacteremia Management

This practice algorithm has been specifically developed for MD Anderson using a multidisciplinary approach and taking into consideration circumstances particular to MD Anderson, including the following: MD Anderson’s specific patient population; MD Anderson’s services and structure; and MD Anderson’s clinical information. Moreover, this algorithm is not intended to replace the independent medical or professional judgment of physicians or other health care providers. This algorithm should not be used to treat pregnant women.

SUGGESTED READINGS


Continued on next page
SUGGESTED READINGS - continued


This practice consensus statement is based on majority opinion of the Staphylococcus Aureus Bacteremia Management workgroup at the University of Texas MD Anderson Cancer Center for the patient population. Theses experts included:

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DEVELOPMENT CREDITS

Staphylococcus aureus Bacteremia Management Department of Clinical Effectiveness

Approved by Executive Committee of the Medical Staff 02/27/2018

Department of Clinical Effectiveness V1
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