Infective Endocarditis

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Note: Infective endocarditis is a complex disease and may result in significant morbidity and mortality. Consultation with Infectious Diseases, Cardiology/Cardiovascular Surgery is highly recommended.

EMPIRIC CHOICE

- Obtain blood cultures, ≥ 3 sets over at least one hour.
- **Withhold empiric therapy until culture collection, unless the patient is septic and/or hemodynamically unstable**
- For most patients with suspected prosthetic or native valve endocarditis:
  - Ceftriaxone 2 g IV q24h
  - Vancomycin 15 mg/kg IV q12h (see Vancomycin Empiric Dosing)
- See Infective Endocarditis Interactive Tool for complete treatment recommendations

COMMON ORGANISMS

- *Staphylococcus aureus*
- Viridans-group streptococci (VGS)
- Enterococci
- Coagulase negative staphylococci
- Other streptococci

CURRENT RESISTANCE ISSUES

- *S. aureus* causes more than 40% of infective endocarditis, ~15% of these are methicillin-resistant *S. aureus* (MRSA) infections
- Viridans-group streptococci, enterococci and other streptococci are variably resistant to penicillin and may require antimicrobial synergy depending upon the minimum inhibitory concentration (MIC) of the organism and anatomy of the patient

ADDITIONAL DIAGNOSTIC AND THERAPEUTIC COMMENTS

- In those with stated penicillin allergy, systematic assessment of the nature of the reaction is essential to provide optimal therapy and avoid therapeutic failure and toxicity.

REFERENCES

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