



# Closing The Brief Case: A Variant on a Classic—*Abiotrophia defectiva* Endocarditis with Discitis

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## ANSWERS TO SELF-ASSESSMENT QUESTIONS

1. *Abiotrophia defectiva* grows best on which media?
  - a. TSA media with 5% sheep blood agar
  - b. MacConkey agar
  - c. Enriched chocolate agar
  - d. Columbia CNA media with 5% sheep blood agar

Answer: c. *Abiotrophia defectiva* grows best on enriched chocolate agar. Both *Abiotrophia* and *Granulicatella* species are fastidious organisms which require supplemental L-cysteine or pyridoxal hydrochloride for growth, both of which are absent from most routine media. Growth is not supported on sheep blood, MacConkey, or CNA agars.

2. *Abiotrophia* and *Granulicatella* species are most reliably susceptible to which antimicrobial?
  - a. Vancomycin
  - b. Meropenem
  - c. Gentamicin
  - d. Ceftriaxone

Answer: a. Vancomycin is the most reliably susceptible antimicrobial for these species. Susceptibilities to ceftriaxone and penicillin vary significantly between *Abiotrophia* and *Granulicatella* species. While broader-spectrum drugs such as carbapenems, gentamicin, and vancomycin are more reliably effective, de-escalation to penicillin and ceftriaxone requires susceptibility testing due to the unpredictable susceptibility profiles.

3. What is the prevalence of infective endocarditis caused by *Abiotrophia* and *Granulicatella* species?
  - a. <5%
  - b. 10%
  - c. 20%
  - d. >25%

Answer: a. *Abiotrophia* and *Granulicatella* species are rare causes of infective endocarditis, contributing to <5% of total disease etiologies. Because they are fastidious organisms and can present as culture-negative endocarditis, their prevalence may be underestimated. The clinical presentation of endocarditis caused by *Abiotrophia* often includes fever, vegetations, cardiac murmur, and, occasionally, emboli.

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