

QP1 – Daily Question Preview: Day 1

Moderator: Henry Masur, MD

IDBR
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BOARD REVIEW

AUGUST 20-24

2022

Daily Question Preview: Day 1

Moderator: Henry Masur, MD, FIDSA, MACP

8/22/2022

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PREVIEW QUESTION

1.1 Which of the following will not grow on sheep blood, chocolate and/or MacConkey agar?

- A) *Granulicatella adiacens*
- B) *Bordetella pertussis*
- C) *Brucella melitensis*
- D) *Vibrio cholerae*
- E) *Abiotrophia defectiva*

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PREVIEW QUESTION

- 1.2** Which of the following bacteria may stain acid-fast positive?
- A) *Rhodococcus species*
 - B) *Cutibacterium species*
 - C) *Finnegoldia species*
 - D) *Microbacterium species*
 - E) *Wolbachia species*

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PREVIEW QUESTION

1.3 Which of the following is the interpretation of this finding?

- A) Methicillin-susceptible *S. aureus* and methicillin-resistant *S. epidermidis*
- B) Methicillin-susceptible *S. aureus* and methicillin-susceptible *S. epidermidis*
- C) Methicillin-resistant *S. aureus* and methicillin-resistant *S. epidermidis*
- D) Methicillin-resistant *S. aureus* and methicillin-susceptible *S. epidermidis*

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 - D) Methicillin-resistant *S. aureus* and methicillin-susceptible *S. epidermidis*

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PREVIEW QUESTION

- 1.4** What is the only cephalosporin active against MRSA?
- A) Cefpodoxime
 - B) Cefapime
 - C) Ceftaroline
 - D) Cefixime
 - E) Cefoxitin

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PREVIEW QUESTION

1.5 What is the major advantage of tedizolid compared to linezolid?

- A) Longer half life
- B) Better penetration of prostate
- C) Better CSF Penetration
- D) Wide spectrum of activity against anaerobes
- E) More effective in clinical studies for VRE

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- 1.6** In *Staphylococcus aureus*, the protein encoded by the *mecA* gene is which of the following:
- A) Leukocidin
 - B) PBP 2a
 - C) Oxacillinase
 - D) IL28 TT
 - E) ESBL

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1.7 Which of the following would be the best choice, among the drugs listed, to treat MSSA bacteremia:

- A) Doripenem
- B) Imipenem
- C) Ceftriaxone
- D) Cefazolin
- E) Aztreonam

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- 1.8** A 63 y.o. male has COVID-19 pneumonia with a BAL-documented super-infection due to *E.coli*.
- The *E.coli* is reported resistant *in vitro* to ceftriaxone, cefazolin, and aztreonam.

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1.8 The *E.coli* is likely ESBL positive and is susceptible *in vitro* to the following drugs. Which drug is preferable for specific therapy?

- A) Doripenem
- B) Tobramycin
- C) Meropenem
- D) Imipenem-cilastatin-relebactam
- E) Piperacillin-tazobactam

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1.9 Which one of the following would you recommend as therapy for a “difficult to treat resistant” *Pseudomonas aeruginosa* outside of the urinary track?

- A) Meropenem-vaborbactam
- B) Ceftolozane-tazobactam
- C) Cefepime
- D) Ceftazidime
- E) Ertapenem

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1.10 Echinocandin class of antifungals has which mechanism of action:

- A) inhibits synthesis of membrane sterols
- B) damages cytoplasmic membrane
- C) interferes with synthesis of fungal cell wall glucans
- D) inhibits fungal DNA synthesis
- E) interfere with synthesis of fungal cell wall chitin

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1.11 45-yr-old male 6 weeks post stem cell transplant for myelodysplasia, with a history of chronic hepatitis C was discharged home to Florida on cyclosporine, mycophenolate, prednisone, Bactrim (tmp/smz), citalopram and voriconazole.

Diffuse nonpruritic erythema developed over his sun exposed skin.

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1.11 The most probable cause was:

- A) porphyria cutanea tarda
- B) graft versus host disease
- C) drug interaction
- D) voriconazole
- E) Bactrim allergy

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1.12 A 14-year-old female presents to your office with sore throat, fever, and malaise, with lymphadenopathy and pharyngitis on physical exam.

Her heterophile antibody test (Monospot) is negative. In addition to other tests, you order EBV-specific serology.

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1.12 Which EBV-specific antibody profile would confirm a diagnosis of acute infectious mononucleosis?

Response	VCA IgM	VCA IgG	EBNA IgG	EA IgG
A)	+	+	+	+
B)	+	+	-	+
C)	-	+	+	+
D)	-	-	+	-

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C)	-	+	+	+
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1.13 72-year-old female with chronic cough, normal CXR, and 1/3 sputums grow MAC. Which one of the following do you recommend?

- A) CT scan of chest AND Additional sputum AFB cultures
- B) Empiric therapy with azithromycin, ethambutol, and rifampin
- C) Additional sputum AFB cultures
- D) Wait for *in vitro* susceptibility data and then treat

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- 1.14** A 50-year-old female with alcohol substance abuse disorder suffered a provoked dog bite
- Bite was cleansed, tetanus toxoid given, and the dog placed under observation
 - Patient is post-elective splenectomy for ITP; she received pneumococcal vaccine one year ago
 - One day later, the patient is admitted to the ICU in septic shock with severe DIC and peripheral symmetric gangrene of the tips of her fingers/toes

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- 1.14** Which one of the following is the most likely etiologic bacteria?
- A) *Pasteurella canis*
 - B) *Capnocytophaga canimorsus*
 - C) *Fusobacterium sp.*
 - D) *Bartonella henselae*

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1.15 A 35-year-old male suffers a clenched fist injury in a barroom brawl. He presents 18 hours later with fever and a tender, red, warm fist wound.

Gram stain of bloody exudate shows a small gram-negative rod with some coccobacillary forms. The aerobic culture is positive for viridans streptococci*

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1.15 Which one of the following organisms is the likely etiologic agent?

- A) *Viridans streptococci*
- B) *Eikenella corrodens*
- C) *Peptostreptococcus*
- D) *Fusobacterium species*

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