

# ANTIBIOTICS

## HOW MUCH DO YOU KNOW? TRY OUR QUIZ FOR PRESCRIBERS Principles of antimicrobial prescribing

Are the following statements True or False?

- 1 Do not start antibiotics without clinical evidence of bacterial infection True / False
- 2 Broad spectrum antibiotic use promotes *C. difficile* infections True / False
- 3 Unnecessary or inappropriate antibiotic prescribing increases the emergence and spread of resistant bacteria True / False
- 4 Take appropriate culture before starting antibiotics True / False
- 5 Always use IV antibiotics for 5 days before switching to oral True / False
- 6 IV antibiotics should be reviewed on a daily basis True / False
- 7 Antibiotics remove the need for surgical or other intervention True / False
- 8 **Penicillin Allergy**  
What is the nearest approximate percentage figure for the proportion of patients with penicillin allergy who may also be allergic to cephalosporins?
  - a) 0.5–6.5%
  - b) 5 – 10.5%
  - c) 30%
  - d) 50%
- 9 Which antibiotic(s) can be used in a patient who has had an anaphylactic reaction to penicillin?
  - a) Cefuroxime
  - b) Meropenem
  - c) Gentamicin
  - d) Ciprofloxacin
  - e) Clarithromycin
  - f) All of the above

10

Which of these drugs are penicillins or penicillin related? (tick)

Drug	Yes	No
Penicillin VK		
Gentamicin		
Phenoxymethylpenicillin		
Co-amoxiclav		
Augmentin		
Erythromycin		
Ceftriaxone		
Meropenem		
Cefotaxime		
Amoxicillin		
Flucloxacillin		
Clarithromycin		
Benzympenicillin		
Cephalexin		
Vancomycin		
Cefuroxime		
Piperacillin/Tazobactam		
Tazocin		
Ciprofloxacin		
Doxycycline		

11 Which of the following are NOT effective in preventing the emergence or spread of antibiotic resistant pathogens?

- Adherence to hand hygiene
- Contact isolation during hospitalisation for patients colonised with MRSA
- Avoiding the use of antibiotics for viral infections
- Treating infections for a longer duration

12 Which of the following is NOT a current example of clinically important antibiotic resistance?

- Meticillin resistant *Staphylococcus aureus*
- Penicillin resistant *Streptococcus pyogenes* (Group A Strep)
- Fluoroquinolone resistant *P. aeruginosa*
- Vancomycin resistant *Enterococci*

13 Which of these conditions have become harder to treat because of antibiotic resistance?

- Gonorrhoea
- Staphylococcal infections
- Meningitis
- All of the above

14 Which of the following conditions should generally be treated with antibiotic therapy in patients who are not immunosuppressed and not pregnant?

- Acute bronchitis
- Asymptomatic urinary tract infection
- Cellulitis
- All of the above

- 15 Which of the following is NOT a way that a bacterium can acquire antibiotic resistance?**
- Acquiring resistance gene from its host's cells
  - On its own through evolution
  - From its parent cell
  - Scavenging resistance genes from the environment
  - Exchanging DNA with another bacterium
- 16 Which of these antibiotics have useful clinical activity against *Pseudomonas*?**
- Ciprofloxacin
  - Co-amoxiclav
  - Ceftazidime
  - Cefotaxime
- 17 Which of these would be suitable to treat Gram positive cocci isolated from a blood culture?**
- Flucloxacillin
  - Vancomycin
  - Ciprofloxacin
  - Trimethoprim
- 18 Which of these conditions is an indication for therapy?**
- A catheter specimen urine of a stroke patient positive with  $> 10^5$  CFU/ml *Candida* species
  - A catheter specimen urine of a patient with heart failure, positive with  $> 10^5$  CFU/ml Coliforms
  - Repeat isolation in a catheter specimen of urine of  $> 10^5$  *Candida* species in an immunosuppressed patient
- 19 Which of these blood culture results most likely represents a contamination and should NOT automatically be treated with antibiotics?**
- One of two blood culture bottles positive with Group A *Streptococci*
  - One of two blood culture bottles positive with a gram negative bacterium
  - One of two blood culture bottles positive with coagulase negative *Staphylococci*
  - One of two blood culture bottles positive with *Klebsiella* sp.
- 20 Which of these conditions needing IV antibiotics could be referred to an out-patient parenteral antibiotic therapy (OPAT) team?**
- Resolving cellulitis needing a further 7 days therapy
  - An ESBL positive urinary tract infection
  - Meningitis – from day 2 of therapy
  - Osteomyelitis needing a further 6 weeks of treatment
  - All of the above

**PLEASE SEE OVERLEAF FOR THE ANSWERS – NO PEEKING!**

## PRESCRIBERS QUIZ – ANSWERS

- 1 Do not start antibiotics without clinical evidence of bacterial infection True
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**10 Which of these drugs are penicillins or penicillin related?**

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Co-amoxiclav	✓	
Augmentin	✓	
Erythromycin		✓
Ceftriaxone	✓	
Meropenem	✓	
Cefotaxime	✓	
Amoxicillin	✓	
Flucloxacillin	✓	
Clarithromycin		✓
Benzympenicillin	✓	
Cephalexin	✓	
Vancomycin		✓
Cefuroxime	✓	
Piperacillin/Tazobactam	✓	
Tazocin	✓	
Ciprofloxacin		✓
Doxycycline		✓

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