

GENERAL MICROBIOLOGY

Lecture 12: Antimicrobial Agents MCQ



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Sem 2



Lecture 12 (Antimicrobial)

<p>1- Antibiotic resistant bacteria emerge as result of which of these mechanism</p> <ul style="list-style-type: none"> a. Changing from aerobic to anaerobic metabolism b. Increasing the motility by flagella c. The alternation of the antibiotic target d. The presence of accumulation barriers such as the capsule e. The production of enzymes as the neuraminidase 	<p>C</p>
<p>2- Regarding the mechanism of action of Antibiotics Which of the following is correct?</p> <ul style="list-style-type: none"> a. Cell wall removal through enzymatic lysis b. Inhibition of Ptn synthesis by targeting tRNA c. Inhibition of Cell memb. mesosome d. Inhibition of of DNA replication e. Inhibition of protein secretory machine 	<p>D</p>
<p>3- Only one of the following is true about antibiotic resistance</p> <ul style="list-style-type: none"> a. Chromosomal resistance occur d.2 induced mutation b. selective pressure is essential for plasmid resistance to develop c. Chromosomal resistance is mainly enzymatic d. B-lactamase production usually has plasmid origin e. Non-genetic origin of resistance can be overcome by B-lactamase inhibitors 	<p>D</p>
<p>4- Synergistic effect of antibacterial drug combination occurs if the activity of</p> <ul style="list-style-type: none"> a. The 2 drugs in combination is significantly greater than that obtained by doubling the activity of either drug alone b. The combination is greater than that either drug alone but les that that obtained by doubling the activity of either drug alone c. The combination is not greater than that of either drug alone d. The combination is less than that obtained with either drug e. It's combination of piperacillin & tazobactam 	<p>A</p>
<p>5- Which of the following is true regarding bacterial antibiotic resistance</p> <ul style="list-style-type: none"> a. Efflux mechanism is important to produce beta-lactamase b. Enzymatic resistance changes antibiotic targets c. It must be of genetic origin d. Often MRSA is resistant to vancomycin e. R factor is of plasmid origin 	<p>E</p>



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Summary

<p>6- Describe properties of antibiotic include only one</p> <ul style="list-style-type: none"> a. Selective permeability b. narrow spectrum c. long plasma half-life d. Develop strong resistance e. Develop hypersensitivity 	C
<p>7- All the following are true about Chromosomal resistance EXCEPT?</p> <ul style="list-style-type: none"> a- Less common b- Need the presence of antibiotic (selective pressure factor) c- Low frequency of transmission d- p12 of 30S ribosomal subunit → Streptomycin resistance is example e- is caused due to induced mutation → Altered target 	E
<p>8- Methods of evaluation of antibiotic activity</p> <ul style="list-style-type: none"> a- Disc diffusion method b- Dilution method c- E test d- All of above 	D
<p>9- Media used in Disc diffusion method</p> <ul style="list-style-type: none"> a- Blood agar b- CLED agar c- Muller Hinton media d- Thayer martin media 	C
<p>10- The lowest concentration of antibiotic which inhibit visible growth of microorganism after overnight incubation is called</p> <ul style="list-style-type: none"> a- Minimal bactericidal concentration (MBC) b- Minimal inhibitory concentration (MIC) c- Antibiotic sensitivity test d- E test 	B
<p>11- The lowest concentration of antibiotic which kill a particular bacteria is called</p> <ul style="list-style-type: none"> a- Minimal bactericidal concentration (MBC) b- Minimal inhibitory concentration (MIC) c- Antibiotic sensitivity test d- E test 	A
<p>12- Which of the following causes destroys chloramphenicol</p> <ul style="list-style-type: none"> a- B lactamase c- Pencillinase d- Cephalosponase e- Acetyl transferase 	E



<p>13- Which of the following causes inactivate Tetracyclins a- B lactamase c- Pencillinase d- Cephalosponase e- Acetyl transferase</p>	<p>E</p>
<p>14- Disadvantages of the inappropriate use of combination a- Antagonism possibility c- High cost. d- Increase the chance for drug reaction e- All of above</p>	<p>E</p>
<p>15- Advantages of the use of antibiotic combination a- Promote treatment in patients suspected to have serious microbial infections. b- Prevent or delay drug resistance. c- Effective in mixed or unknown infection. e- All of above</p>	<p>E</p>
<p>16- Additive (indifferent) effect of antibiotic combination a- bacteriostatic drug + bracteriostatic drug b- bactericidal drug + another bactericidal drug c- bacteriostatic drug + a bactericidal drug e- Non of above</p>	<p>A</p>
<p>17- Synergistic effect of antibiotic combination a- bacteriostatic drug + bracteriostatic drug b- bactericidal drug + another bactericidal drug c- bacteriostatic drug + a bactericidal drug e- Non of above</p>	<p>B</p>
<p>18- Antagonist effect of antibiotic combination a- bacteriostatic drug + bracteriostatic drug b- bactericidal drug + another bactericidal drug c- bacteriostatic drug + a bactericidal drug e- Non of above</p>	<p>C</p>