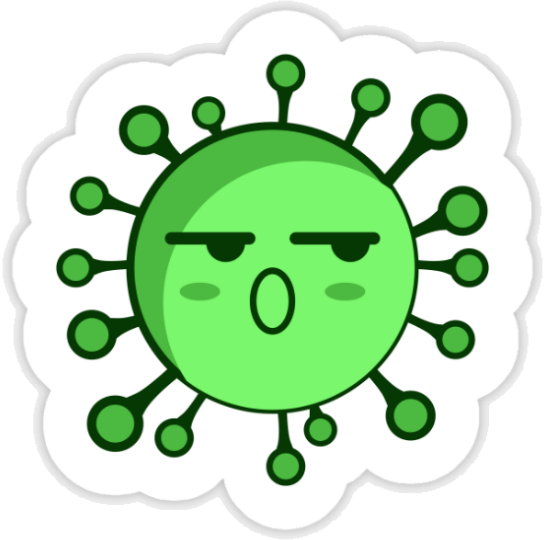




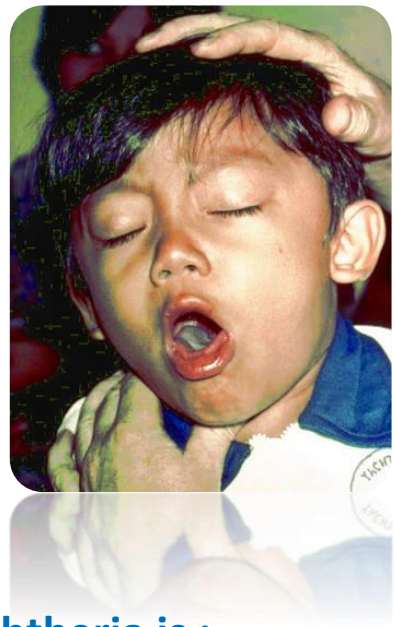
Respiratory infections

MCQ

1- C. diphtheria are characterized by :

a- Spore formation
b- Capsulation
c- Chinese letter appearance
d- Gram negative bacilli

DIPHTHERIA



2- C. diphtheria carrier harbors the organism in :

a- Throat
b- Nose
c- Skin
d- A,b
e- Colon

DIPHTHERIA

3- The most common mode of transmission of diphtheria is :

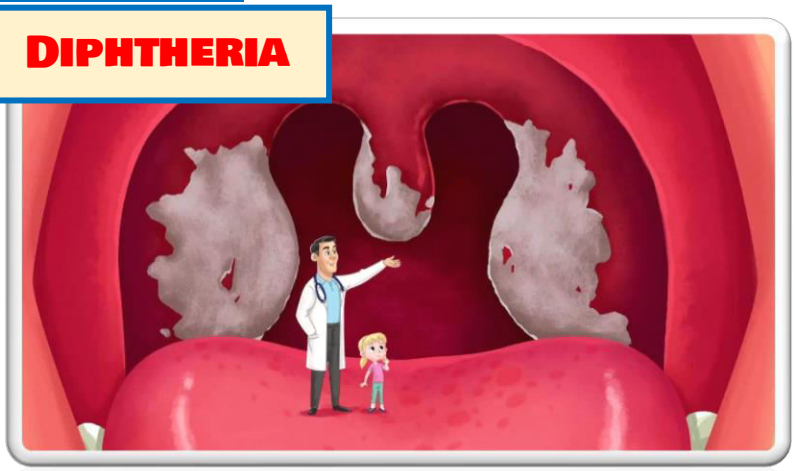
a- Water
b- Contact
c- Droplets
d- Arthropods

DIPHTHERIA

4- Pathogenicity of diphtheria is due to :

a- Invasion
b- Exotoxin production
c- Endotoxin production
d- IgA protease

DIPHTHERIA



5- Diphtheria is treated by :

a- Penicillin
b- Toxoids
c- Anti toxic serum
d- A, c
e- A, b

DIPHTHERIA

6- **Active immunization against diphtheria includes the following except :**

a- Toxoid
b- Anti toxic serum
c- Vaccine
d- DTP

DIPHTHERIA



7- **Mechanism of diphtheria toxoid :**

a- Disrupt cell membrane
b- Block nucleic acid synthesis
c- Block protein synthesis
d- Interfere with neurotransmission

DIPHTHERIA

8- **Diphtheria toxin :**

a- Heat stable
b- Stimulate cell mediated immunity
c- Increase adenyl cyclase
d- Inhibit elongation factor 2

DIPHTHERIA

9- **Diphtheria toxin can cause the most serious damage to :**

a- Suprarenal glands
b- Heart
c- Nerves
d- All of the above

DIPHTHERIA

10- **Best medium for C. diphtheria :**

a- Chocolate agar
b- Nutrient agar
c- Loffler's serum
d- Blood agar

DIPHTHERIA

11- **C. diphtheria are :**

a- Oxidase positive
b- Catalase negative
c- Oxidase negative
d- DNAse positive

DIPHTHERIA



12- **B subunit of Diphtheria toxin function :**

a- Lyse cell membrane
b- Binding to cell
c- Invasion of tissues
d- Toxin production

DIPHTHERIA

13- **Diptheria toxin is heat labile, highly toxic and highly antigenic**

A- True
B- False

DIPHTHERIA

14- **Commonest method for diphtheria transmission :**

a- Contact
b- Water
c- Feco-oral
d- Droplets

DIPHTHERIA

15- **Greyish pseudomembrane formed by C. diphtheria is composed of :**

a- Necrotic cells
b- Blood cells
c- Fibrin
d- All of the above

DIPHTHERIA

16- **Complications of Diphtheria infection is :**

a- Severe diarrhea
b- Meningitis
c- Suffocation
d- All of the above

DIPHTHERIA



17- **Doses of DTP vaccine :**

a- 2,4,6,12 months
b- 2,4,6,10 months
c- 2,4,6,18 months
d- 4,6,8,12 months

DIPHTHERIA

18- **Viruses are the commonest to cause pharyngitis**

a- True
b- False

INTRO

19- **The most common bacterial cause of pharyngitis :**

a- H.influenza
b- Borrelia vincenti
c- Streptococcus pyogenes
d- Group A beta hemolytic streptococci

INTRO

20- **Treatment of Vincent angina :**

a- Tetracycline
b- Azithromycin
c- Doxycycline
d- Penicillin

VINCENT ANGINA

21- **Risk factors for candida oral thrush infections :**

a- Diabetes
b- Immunecompromised patients
c- Antibiotic therapy
d- Corticosteroid therapy
e- All of the above

CANDIDA

22- **The most common cause of epiglottitis :**

a- Strept pyopgenes
b- Staph aureus
c- Hemophilus influenza
d- Parainfluenza virus

INTRO



23- **Known as coryza :**

a- Laryngitis
b- Sinusitis
c- Rhinitis
d- Epiglottitis

INTRO

24- **The most common cause of sinusitis :**

a- Bacteria
b- Viruses
c- Fungi

INTRO

25- **Produce toxin which can shut down protein synthesis :**

a- H. influenza
b- Borrelia vincenti
c- C, diphtheria
d- Strept. Pyogenes

DIPHTHERIA

26. **What is the most common microbial cause of rhinitis?**

a. Haemophilus influenzae.
b. Influenza viruses.
c. Klebsiella pneumoniae.
d. Rhinoviruses.
e. Streptococcus pyogenes.

INTRO

27. **What are the most common bacteria causing sinus infections?**

a. Haemophilus influenzae, Moraxella catarrhalis, and Streptococcus pyogenes.

INTRO

b. Haemophilus influenzae, Strep. Pneumoniae and Streptococcus pyogenes.
c. Klebsiella pneumoniae, Haemophilus influenzae, and Moraxella catarrhalis.
d. Strep. Pneumoniae, Haemophilus influenzae, and Moraxella catarrhalis.

28. **65 years old man with leukemia treated by cytotoxic drug complains of painful tongue and throat lesion with difficulty in swallowing. Examination of the mouth shows whitish discharge. Microscopic examination of stained smear of this discharge revealed budding yeast cells. Which of the following is the causative organism?**

a. Aspergillus niger
b. Candida albicans
c. Mucor
d. Mycobacteria

29. **What is the most common microbial cause of sore throat?**

a. Corynebacterium diphtheriae
b. Haemophilus influenzae.
c. Klebsiella pneumoniae.
d. Streptococcus pyogenes.
e. Viruses.

INTRO

30. **What is the most common bacterial cause of sore throat?**

a. Viruses.
b. Corynebacterium diphtheriae
c. Haemophilus influenzae.
d. Streptococcus pyogenes.
e. Streptococcus pneumoniae.

INTRO



31. **A 30-year-old man had a two-day history of a fever of 38.8º C, a sore throat, and shortness of breath. On physical examination, the patient was found to have cervical adenopathy and a thick gray, tissue-like material covering his tonsils. What is the suspected diagnosis for this case?**

a. Candida oral thrush
b. Diphtheria
c. Streptococcal tonsilitis
d. Vincent's angina.

DIPHTHERIA

32. **In the previous case, what are the culture medium used to isolate the infecting organism?**

a. Bordet-Gengou agar
b. Chocolate agar with factors V and X
c. Loeffler's serum
d. Löwenstein-Jensen
e. Thayer-Martin

DIPHTHERIA

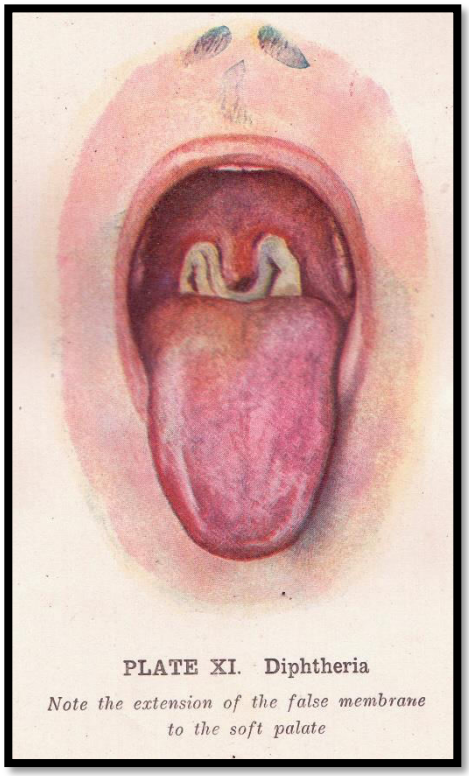


PLATE XI. Diphtheria
Note the extension of the false membrane to the soft palate

33. **What is the color of Corynebacterium diphtheriae colonies on blood tellurite medium?**

a. Green.
b. grey to black.
c. Orange.
d. White to yellow.

DIPHTHERIA

34. **What is the most important virulence factor for Corynebacterium diphtheriae?**

a. Adhesion proteins.
b. Biofilm formation.
c. Invasiveness.
d. polysaccharide capsule
e. Toxin production.

DIPHTHERIA

35. **Corynebacterium diphtheriae is best characterized by which of the following statements?**

a. It secretes exotoxin that has been called “verotoxin” and “Shiga-like toxin”

b. It produces a toxin consisting of two subunits, A and B, which stops protein production.

c. It produces a toxin consisting of two subunits, A and B, which cause severe spasmodic cough usually in children

d. It secretes erythrogenic toxin that causes the characteristic signs of scarlet fever

DIPHTHERIA

36. **Which of the following management procedures has the first priority when a diagnosis of diphtheria is suspected?**

a. Administration of antibiotics

b. Administration of diphtheria antitoxin

c. Administration of DPT vaccine

d. Removal of the pseudomembrane of the throat

37. **A 50-year-old alcoholic man has a big painful pharyngeal and gum necrotic ulcer. A Gram stain was done. Which of the following may be most probably seen in the stained film?**

a. Gram negative cocci

b. Gram negative cocco- bacilli

c. Gram variable bacilli

d. Two gram negative organisms.

VINCENT ANGINA

38. **In the previous case, what are the microbes you will see?**

a. Borrelia vencintii and Fusiform bacilli

b. Borrelia vencintii and Haemophilus parainfluenzae

c. Francisella tularensis and Fusiform bacilli

d. Haemophilus ducreyi and Borrelia vencintii

39. **What is the best diagnosis?**



a. oral inflammatory syndrome
b. Vincent's angina
c. Infectious mononucleosis
d. Infectious pharyngitis

40. **What is the most common bacterial cause of epiglottitis?**

a. Streptococcus pyogenes.
b. Hemophilus influenza
c. Streptococcus pneumoniae
d. Mycoplasma pneumonia

INTRO

41. **What is the most common causative organism of community acquired typical pneumonia?**

a. Mycoplasma pneumonia.
b. Klebsiella pneumoniae.
c. Haemophilus influenzae.
d. Streptococcus pneumoniae
e. Chlamydia pneumonia

PNEUMONIA

42. **What is the most important virulence factor for Streptococcus pneumoniae?**

a. Toxin production.
b. Adhesion proteins.
c. polysaccharide capsule
d. Invasiveness.
e. Biofilm formation.

PNEUMOCOCCI

43. **What is the main component of anti- pneumococcal vaccine?**

a. capsular polysaccharide antigens.
b. live attenuated strains.
c. Killed strains.
d. Recombinant DNA.
e. Inactivated toxin.

PNEUMOCOCCI

44. **What is Quellung reaction?**

PRACTICAL

a. a bacterial motility test
b. a capsule detection test
c. a serological antibody detection test
d. Direct antigen detection test

45. **Quellung reaction is usually used for diagnosis of which organism?**

a. Group A Streptococci
b. Influenza virus
c. Pneumococci
d. Saphylococcus aureus

PRACTICAL

46. **Which one of the following organisms causes primary atypical pneumonia in humans?**

a. Mycoplasma hominis
b. Saphylococcus aureus
c. Mycoplasma pneumonia
e. Pneumococci

PNEUMONIA

47. **What is the mode of transmission of Legionella pneumophila?**

a. Contact with convalescent carriers.
b. Contact with infected animals.
c. Inhalation of airborne droplets from a case.
d. Inhalation of airborne spores.
e. Inhalation of contaminated water aerosols.

LEGIONELLA

48. **What is causative organism of whooping cough?**

a. Bordetella pertussis
b. Chlamydia pneumonia
c. Coxiella burnetti.
d. Klebsiella pneumoniae.
e. Mycoplasma pneumonia.

PERTUSSIS



49. **Which of the following procedures can detect the etiologic agent of whooping cough?**

a. Cold agglutination test
b. Culture of respiratory secretions in HeLa cells after centrifugation of the inoculated tubes
c. Culture of respiratory secretions on Bordet-Gengou medium
d. Direct microscopy of sputum by Giemsa stain

PERTUSSIS

50. **What is causative organism of Plague?**

a. Bordetella pertussis
b. Chlamydia pneumonia
c. Coxiella burnetti.
d. Klebsiella pneumoniae.
e. Yersinia pestis

PLAGUE



51. **What is causative organism of Q fever?**

a. Bordetella pertussis
b. Chlamydia pneumonia
c. Coxiella burnetti.
d. Klebsiella pneumoniae.
e. Yersinia pestis

Q FEVER

52. **What is causative organism of wool sorter's disease?**

a. Bacillus anthracis.
b. Bordetella pertussis
c. Chlamydia pneumonia
d. Coxiella burnetti.
e. Legionella pneumophila.

WOOL SORTER'S

53. Concerning microscopic examination of a sputum specimen from a suspected tuberculous patient, what is name of the used stain?

a. Carbol fuchsin.
b. Gram.
c. Methylene blue
d. Ziehl-Neelsen.

PRACTICAL

54. What is the antibiotic that is ineffective against Mycoplasma pneumoniae infection?

a. Azithromycin
b. Doxycycline
c. Erythromycin
d. Penicillin

MYCOPLASMA

55. The following laboratory test can be used efficiently to differentiate Streptococcus pneumoniae from Viridans streptococci:

a. Bile solubility test
b. Catalase test
c. Gram stain
d. Growth on blood agar

PRACTICAL

56. How is hospital-acquired pneumonia identified?

a. Acquired 48h after hospital admission.
b. Acquired 48h before hospital admission.
c. Acquired on time of hospital admission.
d. Acquired one week after leaving the hospital.

PNEUMONIA

57. Which of the given bacteria causes tuberculosis infection in animals and can be transmitted to human by consumption of milk and other animal products?

a. Mycobacterium ulcerans
b. Mycobacterium leprae
c. Mycobacterium bovis
d. Mycobacterium abscessus

TB

58. **What is the method used by Mycobacterium tuberculosis bacteria to avoid innate immunity?**

a. Destruction of complement components
b. Interference with phagosome-lysosome fusion
c. Living in an immuno-rich tissue site
d. Presence of a polysaccharide capsule

TB

59. **What is the type of Mycobacterium tuberculosis according to Oxygen requirement?**

a. Aerotolerant.
b. Facultative anaerobe.
c. Microaerophile.
d. Obligate aerobe.
e. Obligate anaerobe.

TB

60. **What is the main pathogenic mechanism involved in tuberculosis?**

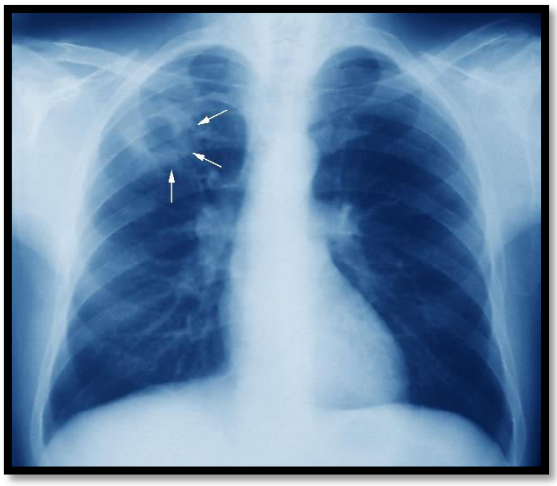
a. Toxin production by the mycobacteria
b. Specific cell adhesion sites
c. Cell-mediated hypersensitivity
d. Humoral immunity
e. Clogging of alveoli by large numbers of mycobacteria

TB

61. **What is the most common route through which tuberculosis is acquired?**

a. Gastrointestinal tract
b. Genital tract
c. Respiratory tract
d. Skin

TB



62. **What is the best medium used to isolate M. tuberculosis from contaminated sputum samples?**

a. Sheep blood agar
b. Löffler's medium
c. Thayer-Martin agar
d. Thiosulfate citrate bile salts sucrose medium
e. Löwenstein-Jensen medium

PRACTICAL

63. **Strains of M. tuberculosis that are resistant to isoniazid and rifampicin are described as which of the following?**

a. Dormant TB
b. Extensive drug resistant TB
c. Latent TB
d. Miliary TB
e. Multidrug resistant TB

TB

64. **Why should anti-tuberculous drugs be in combination?**

a. To allow short term treatment.
b. To prevent complications of Tuberculosis.
c. To prevent emergence of resistance.
d. To prevent spread of infection.

TB

65. **What is the virus that may cause repeated infections in the same individual in the same season?**

a. Adenovirus
b. Para-influenza virus
c. Rhinovirus
d. SARS-coV

COMMON COLD



66. **ten months old infant presenting with fever, cough, and shortness of breath. Chest examination shows retraction of costal margin. Microscopic examination of Cell culture of respiratory specimen shows multinucleate cells. What is the most probable causative agent?**

a. Influenza virus
b. Para-influenza virus
c. Respiratory syncytial virus
d. Rhinovirus e. SARS-coV

67. **Influenza virus contains hemagglutinin and neuraminidase. What does these represent?**

INFLUENZA

a. Exotoxins produced by the influenza virus
b. Glycoprotein receptors on influenza's target cells
c. Glycoproteins on influenza virus that contribute to virulence
d. Proteins found in the nucleus of influenza virus

68. **All of the following statements correctly describe the properties of Influenza A virus EXCEPT:**

INFLUENZA

a. Single stranded RNA virus
b. Have 5 RNA segmented genome
c. A killed vaccine is available annually.
d. Infects humans and animals

69. **Avian flu Virus:**

INFLUENZA

a. Can be transmitted between humans easily
b. Can be treated by oseltamivir
c. Mortality due to infection by it in Egypt was very Low
d. Usually has 8 segmented positive sense RNA virus

70. **Croup in children is mostly caused by:**

CROUP

a. Influenza virus
b. Parainfluenza virus
c. Respiratory syncytial virus
d. Rhinovirus

71. **Select the main means by which antigenic shift occurs in influenza A virus.**

a. Low fidelity of DNA dependent DNA polymerase
b. Low fidelity of RNA dependent RNA polymerase
c. Low fidelity of reverse transcriptase
d. Genetic reassortment between segments of two different strains.
e. Recombination between DNA genomes.

INFLUENZA

72. **Antigenic drift and antigenic shift refer to influenza viruses. Which of the following statements describes events that could lead to a new influenza epidemic?**

a. Antigenic drift represents the sudden appearance of new subtypes of HA and/or NA
b. Antigenic drift represents a gradual change in the HA and/or NA antigens
c. Antigenic shift represents the sudden appearance of new subtypes of HA and/or NA
d. Antigenic shift represents a gradual change in the HA and/or NA antigens
e. Antigenic shift results in the inactivation of interferons

INFLUENZA

73. **Which type of influenza viruses that is responsible for worldwide epidemics?**

a. Type A
b. Type B
c. Type C

INFLUENZA

74. **What is the best method to confirm diagnosis of swine flu?**

a. Detection of serum antibodies using ELISA.
b. Detection of viral antigens in specimens by ELISA.
c. Detection of viral nucleic acid in clinical specimens by PCR.
d. Viral isolation from respiratory samples on tissue culture.

INFLUENZA

75. **What is the main composition of influenza injectable vaccine?**

a. Envelop glycoproteins.
b. Killed strains.
c. Live attenuated strains.
d. Purified viral antigens

INFLUENZA

76. **Reye's syndrome is a rare complication of influenza virus infection associated with intake of:**

a. Antibiotics
b. Paracetamol
c. Salicylates
d. Sedatives

INFLUENZA

77. **What is the name of the virus causing COVID-19?**

a. MERS-CoV
b. SARS- Cov2
c. SARS-Cov

CORONA

78. **What is the genomic structure of coronaviruses?**

a. Double stranded DNA.
b. RNA (single stranded, negative sense)
c. RNA (single stranded, positive sense)
d. Sigle stranded DNA.

CORONA

79. **What is the most common manifestation of parainfluenza virus in adults?**

a. Bronchiolitis
b. Common cold
c. Croup
d. Pneumonia

PARAINFULENZA

80. **Respiratory syncytial virus belongs to which family of viruses?**

a. Orthomyxoviruses
b. enteroviruses
c. Picornaviruses
d. Paramyxoviruses

RSV

ANSWERS

1. C
2. D
3. C
4. B
5. D
6. B
7. C
8. D
9. D
10. C
11. A
12. B
13. A
14. D
15. D
16. C
17. C
18. A
19. C
20. D
21. E
22. C
23. C
24. B
25. C
26. D
27. D
28. B
29. E
30. D
31. B
32. C
33. B
34. E
35. B
36. B
37. D
38. A
39. B
40. B
41. D
42. C
43. A
44. B
45. C
46. C
47. E
48. A
49. C
50. E
51. C
52. A
53. D
54. D
55. A
56. A
57. C
58. B
59. D
60. C
61. C
62. E
63. E
64. C
65. C
66. C
67. C
68. B
69. B
70. B
71. D
72. C
73. A
74. C
75. B
76. C
77. B
78. C
79. B
80. D