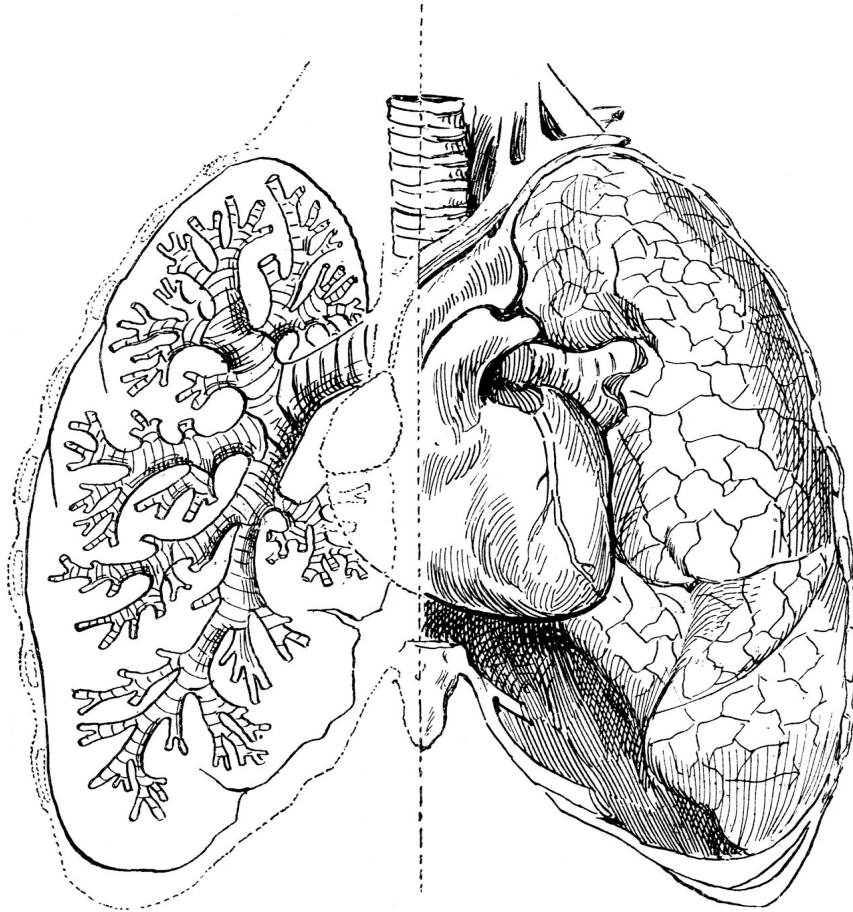


Fungal Questions

435's Teamwork
Respiratory Block



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- The document includes SAQ scenarios and MCQs.
 - Please contact the team leaders for any suggestion, question or correction.
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MCQs

Q1: Which of the following sentences is true:

- A | Respiratory viral infections are less common than fungal and bacterial infections.
- B | Respiratory fungal infections are less common than viral and bacterial infections.
- C | Respiratory bacterial infections are less common than viral and fungal infections.

Q2: Which of the following is opportunistic respiratory fungal infection:

- A | Mucor
- B | *Coccidioides immitis*
- C | *Cryptococcus neoformans*
- D | *C. gattii*

Q3: Which of the following is primary respiratory fungal infection:

- A | *C. gattii*
- B | *Rhizopus*
- C | *Blastomyces dermatitidis*
- D | Mucor

Q4: Dimorphic fungi cause:

- A | zygomycosis
- B | Aspergillosis
- C | Primary Systemic Mycoses
- D | Pneumocystis (PCP)

Q5: *Aspergillus* species are:

- A | Mould fungi
- B | Dimorphic fungi
- C | Yeast
- D | Primary infections

Q6: Which of the following diseases show halo sign in radiology:

- A | Pulmonary zygomycosis
- B | Chronic Aspergillosis (Colonizing aspergillosis)
- C | Invasive pulmonary Aspergillosis
- D | Rhinocerebral zygomycosis

Q7: Which of the following diseases show radiolucent crescent in radiology:

- A | Chronic Aspergillosis (Colonizing aspergillosis)
- B | Invasive pulmonary Aspergillosis
- C | Pulmonary zygomycosis

Q8: The most common cause of fungal sinusitis in KSA is:

- A | Aspergillus nidulans
- B | Aspergillus niger
- C | Aspergillus terreus
- D | Aspergillus flavus

Q9: Which of the following you will see under the microscope in Aspergillosis:

- A | fungal septate hyphae
- B | Non-septate hyphae

Q10: Which of the following treatment is used in aspergillosis:

- A | Sulfamethoxazole
- B | Trimethoprim
- C | Voriconazole
- D | Dapsone

Q11: Which of the following you will see under the microscope in Pulmonary zygomycosis:

- A | Septate hyphae
- B | Non-septate hyphae

Q12: Which of the following is true about Pulmonary zygomycosis:

- A | Acute
- B | Chronic
- C | Infection can not extend to other organs

Q13: Which of the following is a treatment of Pulmonary zygomycosis:

- A | sulfamethoxazole
- B | Trimethoprim
- C | Caspofungin
- D | Amphotericin B

Q14: Which of the following diseases is common in AIDS patients:

- A | Chronic Aspergillosis
- B | Allergic bronchopulmonary (ABPA)
- C | Pulmonary zygomycosis
- D | Pneumocystis (PCP)

Q15: Which of the following organism cause Pneumocystis:

- A | Pneumocystis jiroveci
- B | Rhizopus
- C | Aspergillus flavus
- D | Histoplasmosis

Q16: Which of the following is a treatment of Pneumocystis:

- A | Itraconazole
- B | Caspofungin
- C | Trimethoprim
- D | Amphotericin B

Answer key: (Q1: B - Q2: A - Q3: C - Q4: C - Q5: A - Q6: C - Q7: A - Q8: D - Q9: A -
Q10: C - Q11: B - Q12: A - Q13: D - Q14: D - Q15: A - Q16: C)

SAQs

A 32 man came to KKUH complaining about fever, hemoptysis, cough, leukocytosis, the radiology test show lesions with a halo sign.

1- What can be the diagnosis?

Invasive pulmonary Aspergillosis.

2- What kind of specimens you will take?

Sputum, BAL, Lung biopsy.

3- What will you see under the microscope? and what is the stain you will use?

Fungal septate hyphae, Giemsa Stain, Grocott methenamine silver stain (GMS).

4- What further tests can you do?

Test for Antibody, ELISA test for galactomannan Antigen.

5- Name one medication used to treat this case?

Voriconazole.

6- What are the diseases included in Aspergillosis:

Mycotoxicosis, Allergy, Colonization (without invasion and extension) in preformed cavities, Invasive disease of lungs, Systemic and disseminated disease

7- What are the risk factor of Aspergillosis:

Bone marrow or organ transplantation. AIDS. Diabetes. Cancer: Leukemia, lymphoma.

Drugs: Cytotoxic drugs, steroids.

8- Name two common airborne Fungi:

Aspergillus niger, Aspergillus fumigatus.

9- Name two Primary Systemic Mycoses:

Histoplasmosis, Blastomycosis, Coccidioidomycosis, Paracoccidioidomycosis

10- List some symptoms and signs seen in Allergic bronchopulmonary (ABPA):

Symptoms of Asthma, Bronchial obstruction, Fever, malaise, Eosinophilia, Wheezing, Skin test reactivity to Aspergillus, Serum antibodies to Aspergillus, Serum IgE > 1000 ng/ml, Pulmonary infiltrates.