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Instructor: Ms. HUMA IMTIAZ Subject: clinical mycology

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Question.1: A 45 years old man, Sikandar is presented to the local hospital having an allergic attack just like asthma. Upon investigation of chest x-ray, fungus balls were seen that changed its position when the patient is moved from an erect to a supine position. What according to you is the possible diagnosis for this condition? What is the causative agent which causes the condition?

<u>Answer:</u> According to the possible diagnosis for this condition which attack is "FUNGUS".

The causative agent which cause this condition is "ASPERGILLUS FUMIGATUS".

Question.2: Discuss the following.

- a. Definitive host.
- b. Intermediate host.
- c. Vector.

Answer:

- <u>a.</u> <u>Definitive host: "</u>The organism in which the adult or sexually mature stage of the parasite lives."
- **b.** <u>Intermediate host:</u> "The organism in which the parasite lives during a period of its development only."
- **c.** <u>Vector:</u> "A living carrier (e.g. an arthropod) that transport a pathogenic organisms from an infected to a non-infected host." A typical example is the female Anopheles mosquito that transmission malaria.

Question.3: Explain the transmission and life cycle of plasmodium in your own words.

Answer:

<u>Transmission:</u> Malaria is transmitted primarily by the mosquito bites. But transmission across the placenta, in blood transfusions, and by intravenous drug abuse also occurs.

<u>Life Cycle:</u> There are two Phases in the life cycle: the sexually cycle, which occurs primarily in mosquitoes, and the Asexual cycle, which occurs in the Human, the intermediate hosts.

- The Life cycle in human begins with the introduction of sporozoites into the blood from saliva of the biting mosquito.
- The periodic release of merozoites causes the typical recurrent symptoms of chills, fever, and sweats seen in malaria patients.
- The infectious stage of malaria sporozoite (found in the salivary glands of female mosquito).
- Mosquito takes a blood meal-> Sporozoites released into human's blood-> infect liver cell.

The life cycle have two different stages which is that's.

- a. ERYTHROCYTIC STAGE.
- **b.** EXO-ERYTHROCYTIC STAGE.

THE END...