

Past papers

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



Final – Lectures 1 to 6

Parasitology

﴿ وَإِن تَتَوَلَّوْا يَسْتَبَدِلْ قَوْمًا غَيْرَكُمْ ثُمَّ لَا يَكُونُوا أَمْثَلَكُمْ ﴾

اللهم استعملنا ولا تستبدلنا

collected by :
Aya Altaki



Vector for leishmaniasis is?

A• Anopheles mosquito

B• Tsetse fly

C• Mite

D• Sand fly

E• Tick

Ans:D

Which of the following is the most common form of infection in patients with mucormycosis?

- A• Cutaneous
- B• Rhinocerebral
- C• Pulmonary
- D• Gastrointestinal
- E• Hematogenous dissemination

Ans:B

Which of the following microbiologic properties distinguishes *Entamoeba histolytica* from nonpathogenic ameba like *E. dispar*?

- A• Characteristic shape of the cyst
- B• Fecal-oral route of transmission
- C• Number of nuclei in the trophozoite
- D• Colonization of the colon
- E• Ability to produce cytotoxin

Ans: E

Which one of the following can complete its entire lifecycle in the human host?

- A• *Trypanosoma brucei*.
- B• *Cryptosporidium parvum*.
- C• *Trypanosoma cruzi*.
- D• *Plasmodium falciparum*.
- E• *Toxoplasma gondii*.

Ans: B

Pityriasis versicolor is caused by?

- A• Candida albicans
- B• Dermatophytes
- C• Malassezia furfur
- D• Madurella mycetomatis
- E• None of the above

Ans: c

Which statement regarding fungal growth and morphology is CORRECT?

- A• Pseudohyphae are produced by all yeasts
- B• Molds produce hyphae that may or may not be partitioned with cross-walls or septa
- C• Most yeasts reproduce by budding and lack cell-walls
- D• Most pathogenic dimorphic molds produce hyphae in the host and yeasts at 30c.

Ans:B

Which one of the following anti fungal drugs does not target the biosynthesis of ergosterol in the fungal membrane?

- A• Ketoconazole
- B• 5-flouorocytosine (5-FC)
- C• Nystatin
- D• Fluconazole
- E• All Answers are correct

Ans:B

Which of the following is not considered an opportunistic fungal infection?

- A• Candidiasis
- B• Sporotrichosis
- C• Aspergillosis
- D• Zygomycosi

Ans:B

Which of the following is true regarding Tinea versicolor?

- A• It is an example of cutaneous mycoses
- B• It is caused by candida species
- C• Its only clinical manifestation is hyperpigmentation
- D• It is diagnosed by a device called Wood lamp

Ans: D

Which of the following is false regarding *Entamoeba histolytica*?

- A• They are commensal microorganisms
- B• They move using pseudopodia
- C• They cause a condition of dysentery stool
- D• They may cause a flask-shaped ulcer

The most prevalent infection among all dermatophytoses is?

- A• Tinea pedis
- B• Tinea unguium
- C• Tinea corporis
- D• Tinea capitis
- E• Tinea cruris

Ans:A

Which of the following is CORRECT regarding fungi?

- A• azoles target the cell membrane
- B• Hyphae is a filamentous structure
- C• dimorphic fungi turn to mold in heat
- D• dimorphic fungi turn to yeast in cold

Ans: B

•A traveler developed diarrhea 2 weeks after returning from a trip. The diarrhea has lasted for over 3 weeks and his stools are greasy and foul - smelling Which of the following is the most probable etiologic agent?

- A• Entamoeba
- B• Giardia
- C• Trichnella
- D• Toxoplasma

Ans: B

• African sleeping sickness is caused by which of the following protozoa?

A• *Entamoeba histolytica*

B• *Trypanosoma brucei*

C• *Leishmania donovani*

D• *Plasmodium vivax*

Ans:B

•Chagas' disease is transmitted to humans by?

A• tsetse fly

B• mosquitoes

C• kissing bugs

D• sandflies

Ans:C

•What do the term dimorphic mean?

A• Bisexual

B• Unisexual

C• Exists in two forms

D• Exists in single form

Ans: C

•Leishmania organism are transmitted to humans by?

A• Female sandflies

B• tsetse flies

C• mosquitoes

D• bugs

Fungi are ?

A• prokaryotic

B• eukaryotic

C• prokaryotic and lack chlorophyll

D• eukaryotic and lack chlorophyll

Ans:D

• One of the following statements true about trichomonas vaginalis?

A• Common symptomatic in male

B• Common symptomatic in women

C• Common Asymptomatic in women

D• Don't infect men

•one of the following parasite Cause malaria?

A• Plasmodium

B• Toxoplasma

C• cryptosporidium

D• Donovan

Ans:A

The Trophozoite of *E. histolytica*

Characterized by?

A• infective form

B• diagnostic form

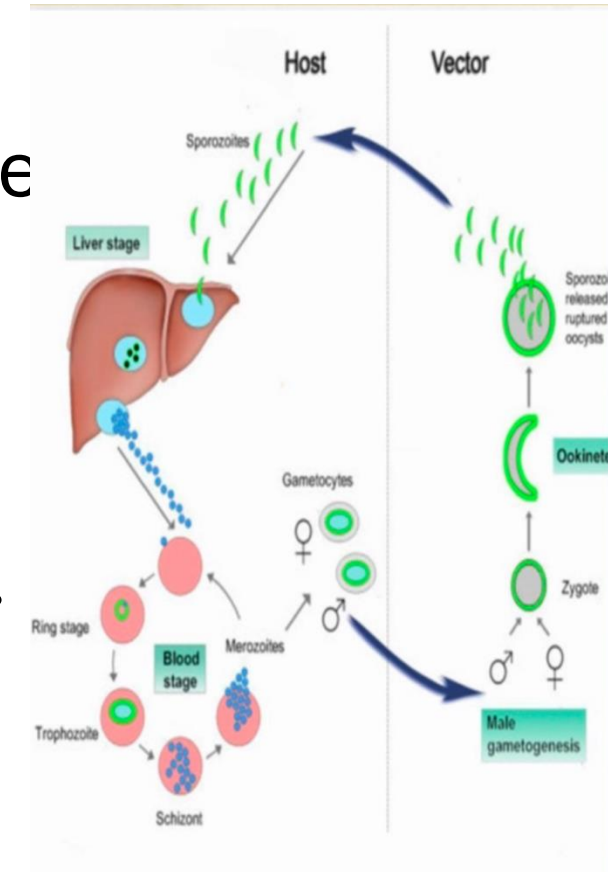
C• has No RBCS

D• Can't find in feces of infected person

Ans:B

This diagram represents a life cycle of a parasite. According to this life cycle, which of the following statements is INCORRECT?

- A• Vector is the definitive host.
- B• Human is the definitive host.
- C• Sporozoites is the infective stage for human.
- D• Vector is essential for life cycle.
- E• RBCs is the primary habitat.



Ans:B

• Which of the following statements concerning *Trichomonas vaginalis* is CORRECT?

A• It is transmitted sexually.

B• It can be diagnosed by visualizing the cyst stage in vaginal discharge.

C• It causes bloody diarrhea.

D• It causes vaginal thrush.

E• It is symptomatic in 70% of males.

• Which of the following statements concerning *Toxoplasma gondi* is INCORRECT?

A• It can be transmitted across the placenta to the fetus

B• It can be transmitted by ingestion of food contaminated by cat feces

C• It can cause encephalitis in immunocompromised patients

D• It can cause severe congenital anomalies in fetus

E• human is the definitive host of the disease

Ans:E

• Dermatophytes are fungi that?

A• Infect the superficial keratinized areas of the body

B• Cause inapparent systemic infections

C• Invariably invade the subcutaneous tissues

D• Produce morphologically identical spores by all genera

E• Best grow at 37°C

•A 50-year-old woman receiving chemotherapy via a subclavian catheter for acute leukemia. She presented with fever and stiffness in the neck with clinical suspicion of meningitis. CF culture grew budding yeasts that formed germ tubes. The organism most likely causing this infection is:

- A• Cryptococcus neoformans
- B• Candida albicans
- C• Aspergillus Fumigatus
- D• Histoplasma capsulatum
- E• Candida tropicalis

Ans:B

- Which statement regarding fungal structure is correct?
- A• The major components of fungal cell walls are proteins such as chitin, glucans, and mannans
- B• The cell wall is not essential for fungal viability or survival
- C• Fungal cell membrane components are the targets for the major classes of anti fungal antibiotics, such as-the polyenes and azoles.
- D• Fungal cell wall components rarely stimulate an immune response

Ans:A

• You are working in a rural medical clinic in China and a 3-year-old girl is brought in by her mother. The child appears emaciated and, upon testing, is found to have anemia. Her feet and ankles are swollen, and there is an extensive rash on parasitic infection that affects her feet, ankles, and knees. The cause of the child's conditions:

- A• Schistosomiasis
- B• Cyclosporiasis
- C• Hookworm infection
- D• Trichuriasis

• A 32-year-old male tourist travelled to Senegal for 1 month. During the trip, he swam in the Gambia river. Two months after his return, he began complaining of intermittent lower abdominal pain with dysuria. Laboratory results of ova and parasites revealed eggs with a terminal spine. Which of the following parasites is the cause of the patient's symptoms?

- A • *Toxoplasma gondii* •
- B • *Schistosoma mansoni* •
- C • *Schistosoma haematobium* •
- D • *Ascaris lumbricoides* •

Ans:c

•What type of specimen was collected for laboratory analysis based on the answer in the previous question?

A• Thick blood smear

B• Stool sample

C• Urine sample

D• Sputum sample

Ans:c

• Several New Guinea villagers known to eat pork during celebrations were reported to be suffering from an outbreak of epilepsy. One of the first things you should investigate is?

A• The prevalence of *Ascaris* infections in the population

B• The presence of *Tania solium* in the pigs

C• The presence of *Trypanosoma brucei gambiense* in the villagers

D• The presence of *Giardia* cysts in the drinking water

• Which one of the following represents the general transmission route of endemic dimorphic fungi to humans?

A• Inhalation of fungal spores.

B• Inhalation of fungal hyphae.

C• Ingestion of fungal yeast cells

D• Ingestion of fungal spores.

E• Ingestion of fungal hyphae.

Which of the following is an intracellular helminth that resides in muscle cells:

ANSWER: *Trichinella spiralis*•

- Which of the following is associated with flask-shaped ulcer in the intestines:

ANSWER: *Entamoeba histolytica*

Which of the following is false about protozoa?

- A. they have rigid cell wall
- B. they are eukaryotic
- C. they are complicated cells
- D. they are unicellular

Which of the following is found in the fungal cell membrane but not found in the mammalian?

- A. Peptidoglycan
- B. Cholesterol
- C. Ergosterol
- D. Chitin
- E. Teichoic acid

Ans:C

Which of the following helminths does not migrate to the lung during its life cycle?

A. *Ascaris Lumbricoides*

B. *Trichuris Trichiura*

C. *Ancylostoma Duodenale*

D. *Necator Americanus*

Ans:B

Which of the following is not part of human microbiota?

- A. *Candida Albicans*
- B. *Candida Tropicalis*
- C. *Malassezia Furfur*
- D. *Cryptococcus Neoformans*

What is wrong about *Ascaris lumbricoides*:

- A. Adult *Ascaris lumbricoides* can cause ectopic migration
- B. *Ascaris lumbricoides* is non-segmented
- C. Can be transmitted via fecal-oral route
- D. Eggs are infective

Flat worms one is wrong:

- A. They are ingested
- B. Metacercaria is infections stage
- C. Members of Platyhelminthes
- D. Requires an intermediate host

Ans:B

Wrong about parasitism parasitism ?

- A. The parasite is physiologically dependent on its host
- B. Heavily infected hosts can be killed by their parasites
- C. Sexual reproduction always occurs in the vertebrate host
- D. It is a type of symbiosis

Ans:c

the filamentous part of fungi is ?

- A. Hyphae
- B. Bugging
- C. Mold
- D. Mycelium

Ans:A



Fungi that is not part of normal flora?

Cryptococcus neoformans

.At a party, a student consumed sushi which contained fish. If a parasite becomes established from this raw fish consumption, which of the following problems is most likely?

- a. Formation of cercaria that will infect other host
- b. Vitamin B12 deficiency
- C. Formation of oocysts
- D. Formation of hydatid cystse. Diarrhea

.Which one of the following can complete its entire life cycle in the human host?

- a. Trypanosoma brucei.
- b. Cryptosporidium parvum.
- C. Trypanosoma cruzi.
- d. Plasmodium falciparum.
- e. Toxoplasma gondii.

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- b. Inhalation of fungal hyphae.
- c. Ingestion of fungal yeast cells.
- d Ingestion of fungal spores.
- e Ingestion of fungal hyphae.

Ans:A

Human-to-human transmission is most likely to occur with:

- a. *Cryptococcus neoformans*
- b. *Histoplasma capsulatum*
- c. *Coccidioides immitis*
- d. *Aspergillus flavus*
- e. *Epidermophyton floccosum*

Ans:E

Vector for leishmaniasis is :

a. Anopheles mosquito

b. Tick

c. Tsetse fly

d. Mite

e. Sand fly

Which of the following is the most common form of infection in patients with mucormycosis?

- a. Cutaneous
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- c. Pulmonary
- d. Gastrointestinal
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Ans:b

Which of the following microbiologic properties distinguishes *Entamoeba histolytica* from nonpathogenic ameba like *E. dispar*?

- a. Characteristic shape of the cyst
- b. Fecal-oral route of transmission
- c. Number of nuclei in the trophozoite
- d. Colonization of the colon
- e. Ability to produce cytotoxins

Ans:e

Which of the following modes of transmission accounts for the development of neurocysticercosis in humans?

- a. Fecal-oral taeniid eggs
- b. Bladderworms in raw beef
- c. Cyclosporan oocysts in water
- d. Ascaris eggs from soil
- e. Toxoplasma zoitocysts in raw pork

Ans:e

Subterminal spine/sharp spine?

Schistosoma haematobium's

. False about ascaris lumbricoid?

The eggs need 2-6 weeks to be embryonated

Which of the following is an intracellular helminth that resides in muscle cells?

Answer: *Trichinella spiralis*

Which of the following is false about *trichomonas vaginalis*?

Answer: it is sexually transmitted in the cyst phase

The definitive host of echinococcus granulosus is:

Answer: dogs

A trematode which is pathogenic through eggs?

Answer: schistosoma mansoni



Symbiosis:

Answer : all of the above (parasitism + mutualism + commensalism)

The most common helminthic infection among children is :

Answer: *Enterobius vermicularis*

Which of the following can complete its entire life cycle in the human host?

- A. *Trypanosoma brucei*
- B. *Cryptosporidium parvum*
- C. *Trypanosoma cruzi*
- D. *Plasmodium falciparum*
- E. *Toxoplasma gondii*

Ans:B

Which of the following is associated with flask shaped ulcer in the intestines?

Answer: *entamoeba histolytica*

The phase that follows sporozites in plasmodium life cycle is :

Answer: schizont



Aflatoxin is mainly produced by:

Answer: *Aspergillus* spp

Which of the following isn't part of normal flora:

Answer: *Cryptococcus neoformans*



Which of the following is true regarding sporotrichosis:

Answer: the causative agent is commonly introduced into wounds while gardening

A traveler developed diarrhea two weeks after returning from a trip. The diarrhea has lasted for over three weeks and his stools are greasy and foul-smelling. Which of the following is the most probable etiologic agent?

- A. Entamoeba
- B. Giardia
- C. Trichinella
- D. Toxoplasma

Ans: B

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- D. *Histoplasma capsulatum*
- E. *Epidermophyton floccosum*

Ans:E

Which of the following can be used to culture mycobacterium

Species:

Answer: middlebrook Agar

Which of the following is a rapidly growing mycobacterium?

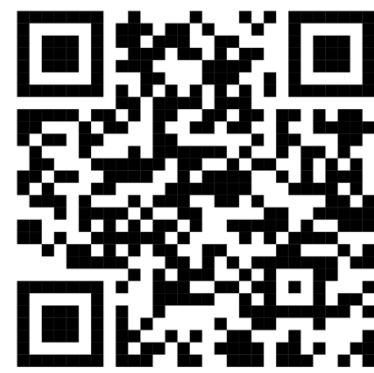
Answer: mycobacterium abscessus

All of the following actors influence the likelihood of transmitting

Active tuberculosis except:

- A. Probability of contact with an infectious person
- B. Duration of contact with an infected person
- C. Presence of extra pulmonary tuberculosis
- D. Presence of laryngeal tuberculosis
- E. Environment in which contact occurs

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