



MICROBIOLOGY



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



FINAL | Lecture ALL lec's +lab

Past Papers

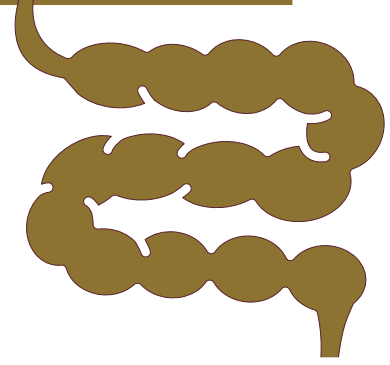
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Reviewed by: **Ahmad Abughneim**

﴿ وَإِنْ تَتَوَلَّوْا يَسْتَبَدِلْ قَوْمًا غَيْرَكُمْ ثُمَّ لَا يَكُونُوا أَمْثَلَكُمْ ﴾

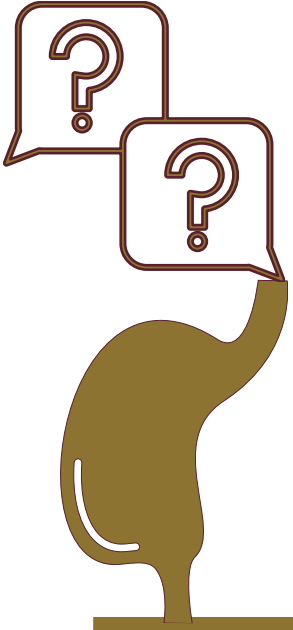
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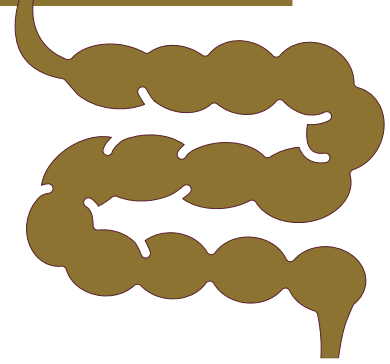




Past Papers

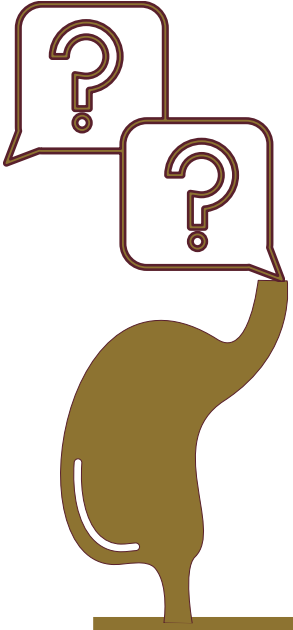
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Lec 1

(رَبِّ إِنِّي لِمَا أَنْزَلْتَ إِلَيَّ مِنْ خَيْرٍ فَقِيرٌ)



Q1: Vibrio cholera, one is WRONG?

- A. Cholera toxin cause Increase of intracellular cGMP
- B. Non-O1/O139 Vibrio causes acute gastroenteritis
- C. Has an enterotoxin
- D. Motile curved bacilli
- E. Are halotolerant

Ans: A

Q2: A 47-year-old male is diagnosed with peptic ulcer disease. Treatment includes antibiotics for infection of the stomach with *Helicobacter pylori*. Which enzyme is secreted by this organism and enables it to survive in the acid environment of the stomach?

- A. Transpeptidase
- B. Oxidase
- C. Catalase
- D. Urease
- E. E. Protease

Ans: D

Q3: A 34-year-old woman presents with fever, nausea, severe abdominal cramping, and bloody diarrhea that was fecal leukocyte-positive. A few days previously, she had eaten undercooked chicken. Of the following, which is the most likely etiologic agent?

- A. *Salmonella typhi*
- B. *Shigella dysenteriae*
- C. *Clostridium perfringens*
- D. *Campylobacter jejuni*
- E. *Yersinia enterocolitica*

Ans: D

Q4: The primary reservoir for *Helicobacter pylori* is?

- A. Dog
- B. Aquatic water
- C. Cat
- D. Rat
- E. Human

Ans: E

Q5: The characteristic 'rice water stool' diarrhea is associated with infection by?

- A. *Campylobacter jejuni*
- B. *Vibrio cholera*
- C. *Salmonella typhimurium*
- D. *Shigella sonnei*
- E. *Coxiella burnetii*

Ans: B

Q6: Which of the following is false regarding *Campylobacter Jejuni*?

- A. It is a microaerophile
- B. It is associated with Guillain-Barre syndrome
- C. It is a small gram-negative curved rod
- D. Pathogenesis is mainly through toxins like enterotoxins
- E. All the above are true

Ans: D

Q7: Which of the following bacteria grow well at 42°C in a microaerophilic environment?

- A. *Vibrio cholera*
- B. *Yersinia Pseudotuberculosis*
- C. *Campylobacter coli*
- D. *Helicobacter pylori*
- E. None of the above

Ans: C

Q₈: Which isn't associated with H. Pylori infection?

- A. Gastritis
- B. Duodenal ulcer
- C. Urease
- D. Chronic meningitis

Ans: D

Q9: Vibrio Parahaemolyticus?

- A. Food poisoning
- B. Septicemia
- C. Wound infection
- D. A + B
- E. A + B + C

Ans: A

Q10: A 52-year-old woman presented with indigestion and heartburn occurring shortly after meals which she treated with over-the-counter antacids. Physical examination revealed mild epigastric tenderness. A radiolabeled- urea breath test is positive What is the most probable etiologic agent:

- A. *Campylobacter jejuni*
- B. *Helicobacter pylori*
- C. *Yersinia enterocolitica*
- D. *Shigella dysenteriae*
- E. *Clostridium difficile*

Ans: B

Q11: The most effective non-invasive test for the diagnosis of *Helicobacter pylori* associated gastric ulcers is?

- A. Detection of *H. pylori* antigen in stool
- B. Growth of *H. pylori* from a stomach biopsy
- C. Growth of *H. pylori* in the stool
- D. IgM antibodies to *H. pylori*
- E. Culture of stomach contents for *H. pylori*

Ans: A

Q12: Which of the following statements best describe *Vibrio cholera*?

- A. Motile by multiple polar flagella
- B. Oxidase negative
- C. Give yellow colonies on TCBS
- D. Give green colonies on TCBS
- E. Gram positive curved bacilli

Ans: C

Q13: A female who had sushi at a party is presented with gastroenteritis, which of the following agents may have caused the gastroenteritis?

- A. H. Pylori
- B. C. Jejuni
- C. V. parahaemolyticus
- D. Campylobacter lari
- E. V. Cholera

Ans: C

Q14: Clinical case/ people who ate chicken from all-you can eat fried chicken buffet are presented with abdominal pain, vomiting, diarrhea, there are leukocytes in the stool, which of the following is the causative agent:?

- A. H. Pylori
- B. C. Jejuni
- C. V. parahaemolyticus
- D. Campylobacter lari
- E. V. Cholera

Ans: B

Q15: T.C.B.S media is selective for?

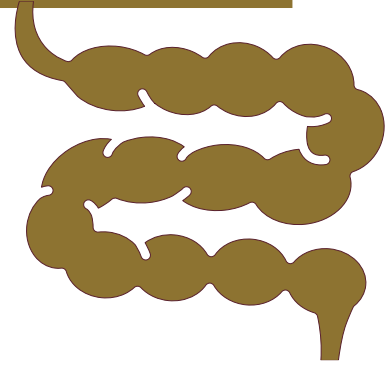
- A. H. Pylori
- B. C. Jejuni
- C. S. Aureus
- D. Campylobacter lari
- E. V. Cholera

Ans: E

Q16: We cultured the blood of a person with bloody diarrhea and bacteria grew at 42C and at 5% oxygen. What are these species:?

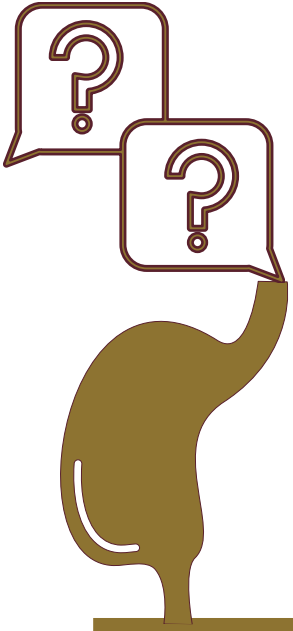
- A. H. Pylori
- B. C. Jejuni
- C. S. Aureus
- D. Salmonella
- E. V. Cholera

Ans: B



Lec 2

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Q1: Leptospirosis, one is wrong?

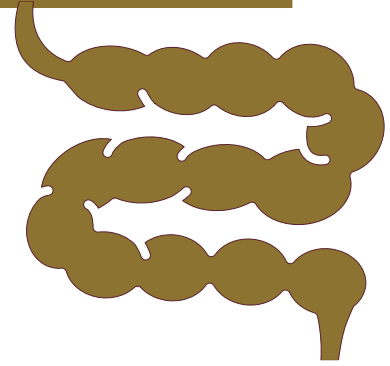
- A. Varying from asymptomatic to fatal disease
- B. Feco-oral transmission
- C. Caused by *Leptospira interrogans*
- D. Zoonosis
- E. Hepatitis is frequent

Ans: B

Q2: Human transmission of Brucella can occur by any of the following EXCEPT?

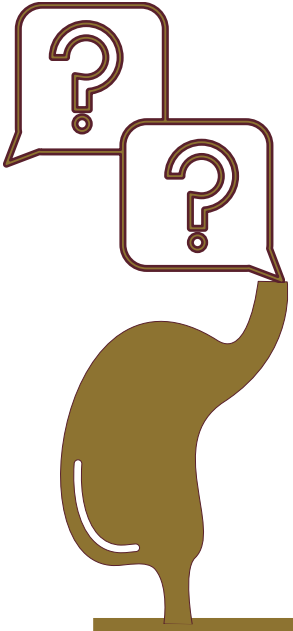
- A. Ingestion of infected milk
- B. Ingestion of contaminated meat
- C. Person to person
- D. Inhalation
- E. Direct contact with animal tissues

Ans: C



Lec 3

(رَبِّ إِنِّي لِمَا أَنْزَلْتَ إِلَيَّ مِنْ خَيْرٍ فَقِيرٌ)



Q1: Which of the following is transmitted by feco-oral route:

- A. Hepatitis A virus.
- B. Hepatitis B virus.
- C. Hepatitis C virus.
- D. Hepatitis D virus.
- E. All of the above.

Ans: a

Q2: Which of the following pairs of hepatitis viruses have vaccine:

- A. HAV, HBV, HCV.
- B. HAV, HBV.
- C. HAV, HBV, HEV
- D. HAV, HBV, HDV.
- E. HAV, HEV.

Ans: b

Q3: All are true regarding hepatitis B virus (HBV), infection EXCEPT:

- A. It is a blood borne pathogen.
- B. HBV vaccine AND HBV immunoglobulin should be given to infants born to mothers carriers of HBV infection.
- C. HBV vaccine is given to all health care workers.
- D. It causes only chronic form of hepatitis.
- E. Can be transmitted through a vertical way from mother to infant.

Ans: d

Q4: • Which of the following is the most associated with hepatocellular carcinoma:

- A. Chronic Hepatitis C.
- B. Acute Hepatitis C.
- C. Acute Hepatitis A.
- D. Chronic Hepatitis B +D.
- E. Chronic Hepatitis B.

Ans: D

Q5: Which of the following Indicates carrier status of HBV:

- A. HBcAg and IgG anti HBc.
- B. HBcAg and IgM anti HBc.
- C. HBeAg after 3 months.
- D. HBeAg and absence of HBV DNA.
- E. HBsAg and HBS antibody.

Ans: A

Q6: Which serologic marker if found indicates resolution of acute HBV infection:

- A. HBsAg.
- B. Anti HBc IgM.
- C. HB DNA.
- D. Anti HBeAg.
- E. Anti HbC IgD.

Ans: d

Q7: Which of the following serologic markers indicate HBV clearance:

- A. HbCAg IgG antibody.
- B. HbSAg Antibody.
- C. HbCAg.
- D. HbCAg IgM antibody.
- E. HbSAg.

Ans: b

Q8) • Which serologic marker is the most sensitive indicator of HCV:

- A. HCV RNA by PCR.
- B. Anti HCV.
- C. HCVAg.
- D. Anti HCVsAg.
- E. HVC DNA by TMA (transcription mediated amplification).

Ans: a

Q9: Which of the following is deemed a hepatitis B carrier: (Ag=antigen, AB=antibody) :

- A. HbSAg (+) HbSAb (+) HbEAB(-) HbCIgM AB (+) HbCIgG AB(+).
- B. HbAg (-) HbSAb (-) HbEAB(+) HbCIgM AB (+) HbCIgG AB(+).
- C. HbSAg (+) HbSAb (+) HbEAB(-) HbCIgM AB (-) HbCIgG AB(+).
- D. HbAg (+) HbSAb (-) HbEAB(+) HbCIgM AB (+) HbCIgG AB(+).
- E. HbSAg (+) HbSAb (-) HbEAB(+) HbCIgM AB (-) HbCIgG AB(+).

Ans: E

Q10: All are true regarding hepatitis A virus(HAV) infection, EXCEPT:

- A. It is transmitted via feco oral route.
- B. HAV vaccine can be given to selected group of patients.
- C. Can cause acute liver failure.
- D. Usually causes chronic infection.
- E. Diagnosis is done by a positive HAV IgM SEROLOGY.

Ans: D

Q11: • A 3-year-old female Gravida 3, Para 2 at 32 weeks of gestation, presents to the emergency department with complaints of severe abdominal pain, fatigue, and nausea, Physical examination is significant for profound jaundice and tenderness to palpation of the right upper quadrant of the abdomen. The patient returned 2 weeks ago from a 1 month-long trip to India. She received sporadic pre-natal care while traveling and reports no known complications in her current pregnancy to date. She denies any past medical problems and states that her prior pregnancy proceeded as a normal vaginal birth without any complications. Infection with which of the following organisms would predispose the worst prognosis with the highest mortality rate for this patient:

- A. Hepatitis C.
- B. Hepatitis A.
- C. Hepatitis B.
- D. Hepatitis D.
- E. Hepatitis E.

Ans: E

Q: Which of the following is considered a treatment for HCV:

- Answer: Direct-acting antivirals (DAA).

• Wrong about HAV:

- Answer: It causes chronic infection.

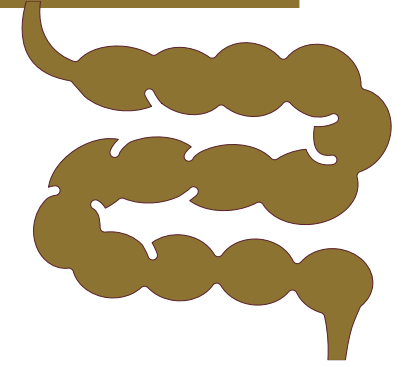
• Contaminated water:

- Answer: Hepatitis A virus.

• Chronic Hepatitis B virus:

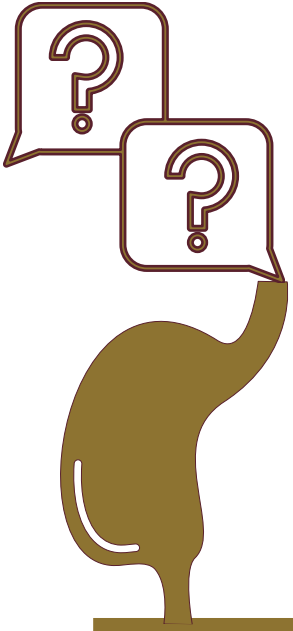
- Answer: More than 6 months

Ans:



lec4

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Q1: Which of the following protozoa causes flask-shaped ulcers in the colon?

- A) *Giardia lamblia*
- B) *Cryptosporidium parvum*
- C) *Strongyloides stercoralis*
- D) *Entamoeba histolytica*
- E) *Shigella sonnei*

Ans: D

Q12: A 35 year old man comes to the physician because of anorexia, Malaise, dark urine and upper abdominal discomfort. His temperature is 37.9 C (100.2 F). Physical examination shows scleral icterus and moderate right upper quadrant tenderness. The liver is palpable below the right costal margin. Laboratory studies show: HBsAg: positive, HBsAb: negative, Anti-HBc IgM: positive, HBeAg positive, Which of the following will most likely change in his serologic findings when this patient enters the window period:

- A. He will become HBsAb-positive.
- B. He will become HBeAg-negative.
- C. He will become HBsAg-negative.
- D. He will become HBcAg- positive.
- E. He will become HBc IgG-positive.

Ans: C

Q2: Amoebic liver abscess most commonly involves which hepatic lobe?

- A) Left lobe via lymphatic drainage
- B) Right lobe via portal vein
- C) Both lobes via systemic circulation
- D) Caudate lobe via hepatic artery
- E) All lobes equally

Ans: B

Q3: Which organism causes steatorrhea (greasy, foul-smelling stool)?

- A) *Entamoeba histolytica*
- B) *Giardia lamblia*
- C) *Cryptosporidium parvum*
- D) *Shigella dysenteriae*
- E) *Campylobacter jejuni*

Ans: B

Q4: What is the most appropriate lab diagnostic method for *Cryptosporidium*?

- A) Blood smear
- B) CSF analysis
- C) Modified acid-fast stain of stool
- D) ELISA of serum
- E) Sputum culture

Ans: C

Q5: What is the definitive host for *Entamoeba histolytica*?

- A) Dogs
- B) Rats
- C) Pigs
- D) Sheep
- E) Humans

Ans: E

Q6: What is the infective stage of Giardia lamblia?

- A) Trophozoite
- B) Flagellated cyst
- C) Cyst
- D) Oocyst
- E) Sporozoite

Ans: C

Q7: Which protozoan presents as an asymptomatic carrier with only cysts in the stool?

- A) *Entamoeba histolytica*
- B) *Giardia lamblia*
- C) *Cryptosporidium parvum*
- D) *Balantidium coli*
- E) *Cyclospora cayetanensis*

Ans: A

Q8: Which of the following is a complication of amoebic colitis?

- A) Esophageal varices
- B) Appendicitis
- C) Pancreatitis
- D) Cholangitis
- E) Pericarditis

Ans: B

Q9: Which drug combination is most effective for invasive amoebiasis?

- A) Tinidazole + doxycycline
- B) Metronidazole + paromomycin
- C) Albendazole + mebendazole
- D) Nitazoxanide + erythromycin
- E) Doxycycline + Metronidazole

Ans: B

Q10: Which protozoa is associated with 3–17 liters of watery diarrhea per day in HIV+ patients?

- A) *Giardia lamblia*
- B) *Entamoeba histolytica*
- C) *Cryptosporidium hominis*
- D) *Balantidium coli*
- E) *Cyclospora cayetanensis*

Ans: C

Q11: A patient presents with abdominal pain, bloody diarrhea, and later develops a liver abscess. Which organism is the most likely cause?

- A) *Giardia lamblia*
- B) *Clostridium difficile*
- C) *Cryptosporidium parvum*
- D) *Entamoeba histolytica*
- E) *Strongyloides stercoralis*

Ans: D

Q12: Which of the following protozoa has a cyst stage with four nuclei (quadrinucleate)?

- A) *Giardia lamblia*
- B) *Balantidium coli*
- C) *Entamoeba histolytica*
- D) *Cryptosporidium*
- E) *Cyclospora*

Ans: C

Q13: Which of the following diagnostic tools is most specific for amoebic liver abscess?

- A) Stool culture
- B) Antigen ELISA from feces
- C) Sigmoidoscopy
- D) Liver function test
- E) CT-guided aspiration

Ans: E

Q14: What is the most reliable method to identify *Cryptosporidium* oocysts in stool?

- A) Gram stain
- B) India ink stain
- C) Modified acid-fast stain
- D) Direct culture
- E) PCR of blood

Ans: C

Q15: Which of the following drugs is used in immunocompromised patients with cryptosporidiosis?

- A) Metronidazole
- B) Nitazoxanide
- C) Paromomycin
- D) Vancomycin
- E) Cefixime

Ans: B

Q16: Which of the following is NOT typically seen in giardiasis?

- A) Greasy floating stool
- B) Tenesmus
- C) Malabsorption
- D) Flatulence and bloating
- E) Watery diarrhea

Ans: B

Q17: Which protozoan is associated with lesions in the duodenum and steatorrhea?

- A) *Cryptosporidium parvum*
- B) *Giardia lamblia*
- C) *Entamoeba histolytica*
- D) *Cyclospora cayetanensis*
- E) *Trichomonas hominis*

Ans: B

Q18: The infective stage of *Cryptosporidium parvum* is:

- A) Sporozoite
- B) Merozoite
- C) Oocyst
- D) Trophozoite
- E) Cyst

Ans: C

Q19: The most common complication of untreated acute amoebic dysentery is:

- A) Malabsorption syndrome
- B) Giardiasis
- C) Hydronephrosis
- D) Esophagitis
- E) Amoebic liver abscess

Ans: E

Q20: What characteristic feature helps Giardia attach to intestinal epithelium?

- A) Flagella
- B) Cilia
- C) Suction disk
- D) Spicules
- E) Pseudopodia

Ans: C

Q21: Which of the following is wrong about Giardia?

- A) Malabsorption
- B) Dorsal sucker
- C) Two prominent nucleoli
- D) 4 pairs of flagella
- E) Causes bloody diarrhea

Ans: E

Q22: Which of the following produces massive watery diarrhea especially in immunocompromised patients?

- A) *Entamoeba histolytica*
- B) *Giardia lamblia*
- C) *Cryptosporidium parvum*
- D) *Trichuris trichiura*
- E) *E. coli*

Ans: C

Q23: A protozoan that causes intermittent episodes of diarrhea alternating with constipation is most likely:

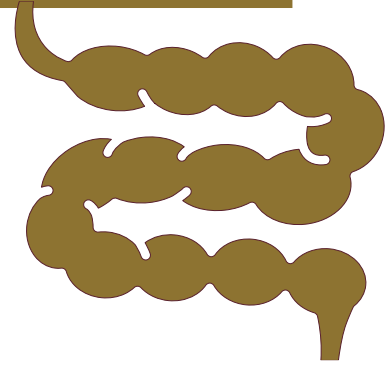
- A) Cryptosporidium
- B) Entamoeba histolytica
- C) Giardia lamblia
- D) Balantidium coli
- E) Trichomonas hominis

Ans: B

Q24: A white worm that migrates to the perianal area at night, causing intense itching, is:

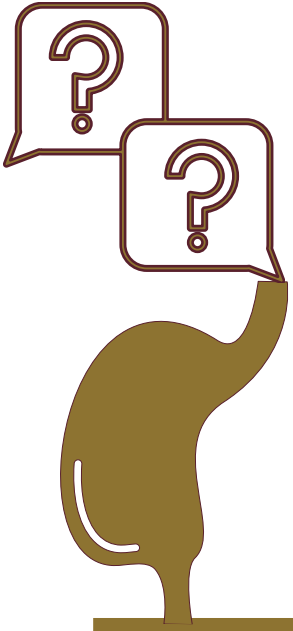
- A) *Giardia lamblia*
- B) *Ascaris lumbricoides*
- C) *Enterobius vermicularis*
- D) *Trichuris trichiura*
- E) *Fasciola hepatica*

Ans: C



lec5

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Q1: *Ascaris lumbricoides* infective stage is:

- A) Unembryonated egg
- B) Larva
- C) Embryonated egg
- D) Adult worm
- E) Trophozoite

Ans: C

Q2: Loeffler's syndrome is associated with which parasite?

- A) *Enterobius vermicularis*
- B) *Trichuris trichiura*
- C) *Ascaris lumbricoides*
- D) *Echinococcus granulosus*
- E) *Taenia solium*

Ans: C

Q3: Which helminth is diagnosed using the cellophane tape test?

- A) *Ascaris lumbricoides*
- B) *Echinococcus granulosus*
- C) *Trichinella spiralis*
- D) *Enterobius vermicularis*
- E) *Schistosoma mansoni*

Ans: D

Q4: The most common symptom of *Enterobius vermicularis* infection is:

- A) Diarrhea
- B) Perianal itching
- C) Rectal bleeding
- D) Abdominal distention
- E) Cough

Ans: B

Q5: Which of the following is true about the female *Enterobius vermicularis*?

- A) Migrates to liver
- B) Lays eggs around perianal area
- C) Produces 200,000 eggs/day
- D) Lives in lungs
- E) Causes jaundice

Ans: B

Q6: The drug of choice for hydatid cyst is:

- A) Albendazole
- B) Nitazoxanide
- C) Ivermectin
- D) Praziquantel
- E) Mebendazole

Ans: A

Q7: The definitive host for *Echinococcus granulosus* is:

- A) Human
- B) Pig
- C) Sheep
- D) Dog
- E) Cow

Ans: D

Q8: In hydatid disease, humans are:

- A) Intermediate hosts
- B) Definitive hosts
- C) Part of natural cycle
- D) Reservoir hosts
- E) Only transmitters

Ans: A

Q9: Schistosomiasis diagnosis is confirmed by:

- A) Blood smear
- B) Chest X-ray
- C) Detection of ova in stool or tissue
- D) Serology only
- E) Stool antigen detection

Ans: C

Q10: Portal hypertension and esophageal varices in schistosomiasis are due to:

- A) Liver necrosis
- B) Egg granulomas in portal circulation
- C) Immune hypersensitivity
- D) Snail toxin
- E) Adult worm damage

Ans: B

Q11: Which of the following schistosome species primarily affects the GI tract?

- A) *Schistosoma japonicum*
- B) *Schistosoma mansoni*
- C) All of the above
- D) None of the above
- E) *Schistosoma haematobium*

Ans: B and A

Q12: Albendazole is effective against all the following EXCEPT:

- A) Hookworm
- B) Ascaris
- C) Hydatid cyst
- D) Schistosoma
- E) Enterobius

Ans: D

Q13: Eosinophilia and larvae in sputum are characteristic of:

- A) *Fasciola hepatica*
- B) *Trichuris trichiura*
- C) *Ascaris lumbricoides*
- D) *Taenia solium*
- E) *Enterobius vermicularis*

Ans: C

Q14: What is the habitat of *Ascaris lumbricoides* in humans?

- A) Lungs
- B) Colon
- C) Stomach
- D) Liver
- E) Small intestine

Ans: E

Q15: Diagnosis of *Echinococcus granulosus* is best confirmed by:

- A) X-ray and serology
- B) Stool microscopy
- C) Liver biopsy
- D) Blood eosinophil count
- E) Sputum smear

Ans: A

Q16: Which one of the following is incorrect about *Ascaris lumbricoides*?

- A) Humid environment is needed for infectivity
- B) Reinfection is possible
- C) Eggs become infective 2 to 6 weeks after deposition
- D) Larvae may be found in sputum or gastric aspirates
- E) Unembryonated egg is the infective stage

Ans: E

Q17: Wrong about Schistosoma:

- A) Pathology is mostly due to eggs
- B) Associated with urinary diseases
- C) Female is shorter and wider than male
- D) Transmission via freshwater snails
- E) Involves portal venous system

Ans: C

Q18: Which of the following parasites causes obstruction of the intestine and biliary tract?

- A) *Trichuris trichiura*
- B) *Ascaris lumbricoides*
- C) Hookworm
- D) *Schistosoma mansoni*
- E) *Giardia lamblia*

Ans: B

Q19: Eggs of which parasite are most likely detected in stool by microscopy and are linked to portal fibrosis?

- A) Echinococcus granulosus
- B) Taenia saginata
- C) Schistosoma mansoni
- D) Enterobius vermicularis
- E) Strongyloides stercoralis

Ans: C

Q20: Which parasite causes biliary obstruction and jaundice in severe cases?

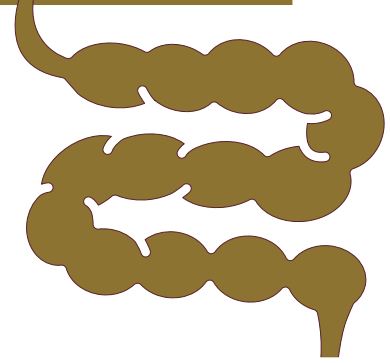
- A) Echinococcus granulosus
- B) Fasciola hepatica
- C) Schistosoma haematobium
- D) Ascaris lumbricoides
- E) Giardia lamblia

Ans: D

Q21: Snail is the intermediate host of which parasite?

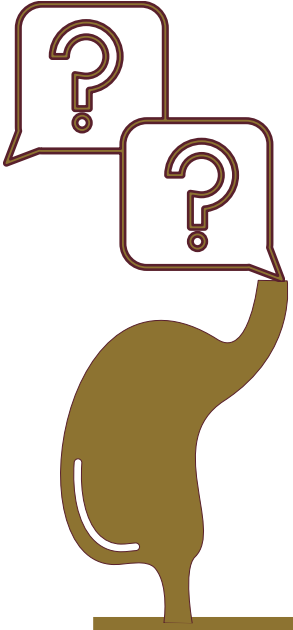
- A) *Schistosoma mansoni*
- B) *Enterobius vermicularis*
- C) *Ascaris lumbricoides*
- D) *Taenia saginata*
- E) *Echinococcus granulosus*

Ans: A



Lab

(رَبِّ إِنِّي لِمَا أَنْزَلْتَ إِلَيَّ مِنْ خَيْرٍ فَقِيرٌ)



Q1: Patient presents with a history of recurrent episodes of diarrhea alternates With constipation and the microscopic examination of stool sample showing as the picture. Which of the following is the cause:

- A. *Entamoeba histolytica*.
- B. *Yersinia enterocolitica*.
- C. *Giardia lamblia*.
- D. *Clostridium difficile*.
- E. Enterotoxigenic *Escherichia coli*.



Ans: a

Q1: What is the identify of the organism on S-S agar with forming black spots (H_2S produced) of the colonies :

- A. *Staphylococcus Spp* •
- B. *E.coli* •
- C. *Shigella* •
- D. *Streptococcus pyogenes*
- E. *Salmonella*

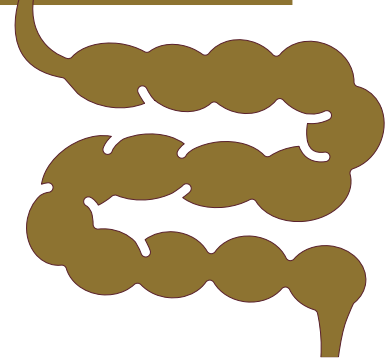
Ans: e

Q3) Patient presents with a history of watery diarrhea of several weeks' duration and the microscopic examination of stool sample showing as the picture. Which of the following is the cause:

- A. *Giardia lamblia*.
- B. *Clostridium difficile*.
- C. *Entamoeba histolytica*.
- D. *Yersinia enterocolitica*.
- E. Enterotoxigenic *Escherichia coli*.

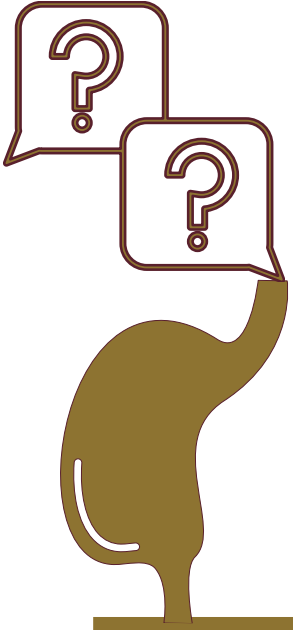


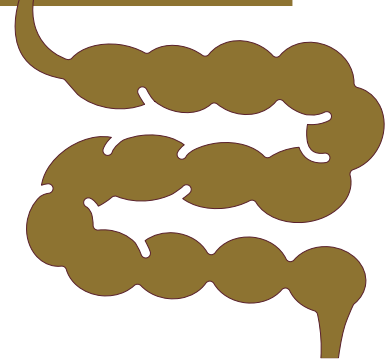
Ans: a



Test bank

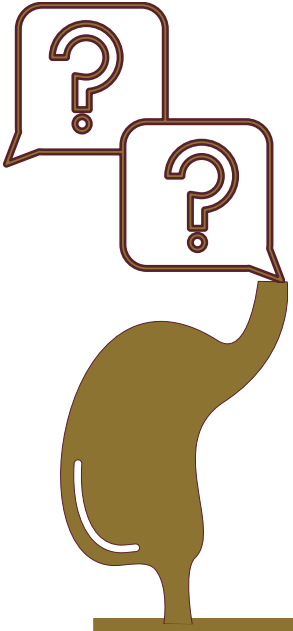
(رَبِّ إِنِّي لِمَا أَنْزَلْتَ إِلَيَّ مِنْ خَيْرٍ فَقِيرٌ)





Lec 2

(رَبِّ إِنِّي لِمَا أَنْزَلْتَ إِلَيَّ مِنْ خَيْرٍ فَقِيرٌ)



Q1: A 36-year-old butcher presents with undulating fever, night sweats with a musty odor, and hepatosplenomegaly. He often handles raw animal tissue. Which pathogen is most likely responsible? ?

- A. *Brucella melitensis*
- B. *Leptospira interrogans*
- C. *Mycobacterium bovis*
- D. *Salmonella typhi*
- E. EHEC

Ans: A

Q2: Which of the following *Brucella* species is most associated with chronic brucellosis in individuals working with pigs?

- A. *Brucella abortus*
- B. *Brucella canis*
- C. *Brucella suis*
- D. *Brucella melitensis*
- E. *Brucella ovis*

Ans: C

Q3: A veterinarian accidentally pricks his finger with a live vaccine for Brucella. Which form of transmission best describes this exposure?

- A. Ingestion
- B. Inhalation
- C. Percutaneous
- D. Feco-oral
- E. Sexual

Ans: C

Q4: All of the following are true about *Brucella melitensis* EXCEPT?

- A. Most severe form of brucellosis
- B. Associated with unpasteurized goat milk
- C. Facultative intracellular organism
- D. Gram-positive coccobacillus
- E. Causes undulant fever

Ans: D

Q5: Which of the following best explains why *Brucella abortus* causes abortion in cattle but not in humans?

- A. Human immunity is stronger
- B. *Brucella* can't infect humans
- C. Human placenta lacks erythritol
- D. Humans are not exposed to cattle
- E. Cattle produce antibodies that fail to protect

Ans: C

Q6: A lab worker accidentally inhales aerosols while processing a suspected brucellosis sample. Which phase of the disease would be optimal for isolating *Brucella* via blood culture?

- A. Chronic stage
- B. Immune phase
- C. Latent stage
- D. Acute bacteremic phase
- E. Recovery phase

Ans: D

Q7: Which species of *Brucella* is catalase and oxidase positive but cannot be detected serologically?

- A. *Brucella melitensis*
- B. *Brucella abortus*
- C. *Brucella suis*
- D. *Brucella canis*
- E. *Brucella ovis*

Ans: D

Q8: In chronic brucellosis, bone marrow samples are preferred over blood for culturing because?

- A. Bone marrow is easier to obtain
- B. Brucella is extracellular in chronic phase
- C. ELISA is not available
- D. Brucella prefers muscle tissue
- E. The bacteremic phase has ended

Ans: E

Q9: Weil's syndrome, a severe complication of leptospirosis, includes all of the following EXCEPT?

- A. Pneumonia
- B. Hepatitis
- C. Hemorrhage **posterior**
- D. Nephritis
- E. Jaundice

Ans: A

For any feedback, scan the code or click on



Corrections from previous versions:

Versions	Slide # and Place of Error	Before Correction	After Correction
V0 → V1	Lec 3 (5) Lec 3 (4) Lec3 (9)	E A C	A D E
V1 → V2			