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QUESTION NO 1 ANSWER:

ENTEROBIUS:

DISEASE:

Enterobius vermicularis causes pinworm infection Enterobiasis

LIFE CYCLE:

The life cycle is confined the humans

The infection is acquired by ingesting the worm eggs

The eggs hatch in the small intestine, where the larvae differentiate into adults and migrate to the colon

The adult male and female worms live in the colon where mating occurs

At night the female migrates from the anus and releases thousands of fertilized eggs on the perianal skin and into the environment

Within 6 hours, the eggs develop into embryonated eggs and become infectious

Reinfection can occur if they are carried to the mouth by fingers after scratching the itching skin of the perianal area

The larvae contained inside the eggs develop (the eggs become infective) in 4 to 6 hours under optical conditions.

Rarely, eggs may become airborne and be inhaled and swallowed.

Retroinfection or the migration of newly hatched larvae from the anal skin back into the rectum may occur but the frequency with which this happens is unknown.

HOSTS: Oxyurid nematodes (pinworm) generally exhibit high host specificity. Humans are considered the only host for Entameoba vermicularis although occasional infections have been reported in captive chimpanzees.

QUESTION NO 2 ANSWER:

PATHOGENESIS ASCARIS

The major damage occurs during larval migration rather than from the presence of the adult worm in the intestine

The principal sites of the tissue reaction are the lungs, where inflammation with an eosinophilic exudate occurs in response to larval antigens

Because the adults derive their nourishment from ingested food, a heavy worm burden may contribute malnutrition, especially in children in developing countries

Most infections are asymptomatic

ASCARIS PNEUMONIA:

with fever, cough, and esonipenia can occur with a heavy larval burden

Abdominal pain and even obstruction can result from the presence of adult worms in the intestine

LAB DIAGNOSIS:

Diagnosis usually made microscopically by detecting eggs in the stools

Occasionally, the patient sees adult worms in the stools.

QUESTION NO 3 ANSWER:

TRANSMISSION:

Entameoba histolytica is transmitted primarily through oral fecal route.

Infective cysts can be found in fecally contaminated food and water supplies and contaminated hands and food handlers.

Sexually transmission is possible, especially in the setting or oral anal practice.

LIFE CYCLE:

Mature cysts are ingested through mouth

The cysts come to stomach and resistant to stomach environment and then the cysts are carried into the small intestine.

Indside the small intestine each cyst divides and produces eight Trophozoites

Then it moves to large intestine to the colon

These Trophozoites then star colonization inside the large intestine

Now they can cause two types of diseases

Invasive infection and noninvasive infection

Invasive infection occurs 10% but are serious condition

Non-invasive infection occurs 90% but but are not sereve.

In case of non-invasive infection the trophozotes go to the surface of the mucosa layer and start multiplication by binary fission, then colonize on the surface layer and form new cysts

In case of invasive infection the Trophozoites will colonize and invade the epithelial cells and this will cause epithelial cell lyse, will create ulcer within the large intestine.

In neutrophil response they will further cause damage.

After the formation of ulcers in the large intestine to the colonic cells and mucos membrane the Trophozoites will move towards the blood stream.

ENTAMEOBA HISTOLYTICA:

TRANSMISSION:

Fecal oral route with contaminated water and good

INFACTIVE STAHGE:

Mature cyst

LOCALIZE

Large intestine

INFECTIONS

Two types:

Ameobic dysentery

Extra intestinal amoebas

AMEOBIC DYSENTRY

Inflammation of gut

Large intestine

Painful diarrhea containing blood and mucous caused by ulcer formation

ENTAMEOBA HISTOLYTICA HAS TWO MAIN FORMS:

A) CYST FORM:
   Infective in nature
   Spherical in shape
   And now this cyst can infect new human by contamination of drinking water as unhygienic food.
   So essentially in Non-invasive infection these Trophozoites will live in human body asymptomatically as cause mild diarrhea
B) TROPHOZOITES FORM:
   15 to 30um diameter
   Shape like ameoba

   LIFE CYCLE:

   1) Cyst due to mouth.
   2) Small intestine
      Each cyst divides to produce 8 trophozoites in small intestine.
      3)Trophozoites will then move to colon of large intestine these trophozoites will start colonization.
      Now they can cause two types of infection.
      INVASIVE INFECTION :
      Occur 10% serious condition
      NON INVASIVE INFECTION
      Occur 90% of the time not serve.
      HT is go on surface of the mucous layer and can multiply by binary fusion, colonized at the surface of mucous membrane and will form new cyst.
      After entering the blood the trophozoites can target other organs.
      So in invasion through the blood stream Trophozoites can inject other sites such as liver, lungs, brain.

      LAB DIAGNOSIS:

      fecal examination of cyst.

QUESTION NO 4 ANSWER:

TRYPANOSOMA CRUZI LABORATORY DIAGNOSIS:

Acute disease is diagnosed by demonstrating the presence of trypomastigotes in think or thin films of the patient blood.

Both stained and wet preparations should be examined. the latter for motile organisms

Because the trypamostigotes are not nemurous in the blood, other diagnostic methods may be required, namely, (1), a stained preparation of bone marrow aspirate or muscle biopsy specimen (which may reveal amastigotes);

(2) culture of the organism on special medium.

QUESTION NO 5 ANSWER:

LEISHMANIA SPECIES NAMES : There are four species names which are under

1) Leishmania donovani DONOVANI; (kala azar) visceral leishmania
2) Leishmania tropica CUTANOUS (leishmaniasis)
3) Leishmania mexicana CUTANOUS (leishmaniasis)
4) Leishmania braziliensis MUCOCUTANOUS (leishmaniasis

CLINICAL FINDINGS:

Symptoms begin with intermittent fever, weakness, and weight loss
Massive enlargement of the spleen is characteristic
Hyperpigmentation of the skin is seen in light-skinned patients(kala-azar black sikness)
The course of disease runs for months to years
Initially patients fell reasonably well despite persistent fever
As anemia, leukopenia, and thrombocytopenia become more profound, weakness, infection, and gastrointestinal bleeding occur.
Untreated severe disease is nearly always fatal as a result of secondary infection.