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Paper # Mycology

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Q1: Life cycle of Entrobium
verruicularis.

Ans \Rightarrow This life cycle is confined to humans.

\Rightarrow Infection which is acquired by the worms egg ingesting.

\Rightarrow In small intestine this egg hatches

\Rightarrow where the larvae is migrate to the colon and differentiate into adults.

\Rightarrow The worms of an adult male or female live in the colon, where mating occurs.

\Rightarrow In night time the female release thousands of fertilized eggs and ~~the~~ migrates from the anus at night

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on the perianal skin and into the environment.

⇒ So the eggs develop and become infectious into embryonated ^{eggs} within in 6 hours.

⇒ At last after ~~the~~ scratching the itching skin the reinfection can occur if they carried by finger to the mouth.

and so on.

Q2 - Ascari's Pathogenesis.

The pathogenesis of ascari's which is related to the reaction of host and ^{to} migration of larval as well as the location and number of an

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adult worm in the body.

⇒ They are migrating through the mucosa of intestinal.

⇒ In human host which provoke hypersensitivity reaction by liver and lungs.

⇒ Abdominal pain.

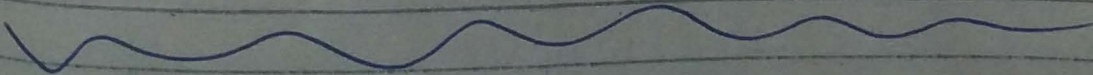
⇒ Ascari's pneumonia.

⇒ eosinophilic exudate.

⇒ Infections are asymptomatic mostly.

⇒ worm burden.

⇒ worm in intestine. etc
and so on.



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Transmission and

Q3 Life cycle of Entamoeba histolytica:-

Transmission:-

Ans:- Here we have firstly general properties are as under-

(i) Distribution of world wide.

→ Protozoan → Rhizopod.

→ Human being as host.

→ Transmitted through fecal, oral route
Food contaminated.

→ Found in large intestine

→ Stage of infective as
mature cyst.

⇒ There are two types of
infection which are both invasive.

(i) Amoebic dysentery (Intestinal amoebiasis)

(ii) Extra intestinal amoebiasis.

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Amoebic dysentery ↓

→ Ulcer formation which causes the blood and mucus as painful diarrhoea.

→ Gut inflammation

→ etc.

⇒ It has two main forms

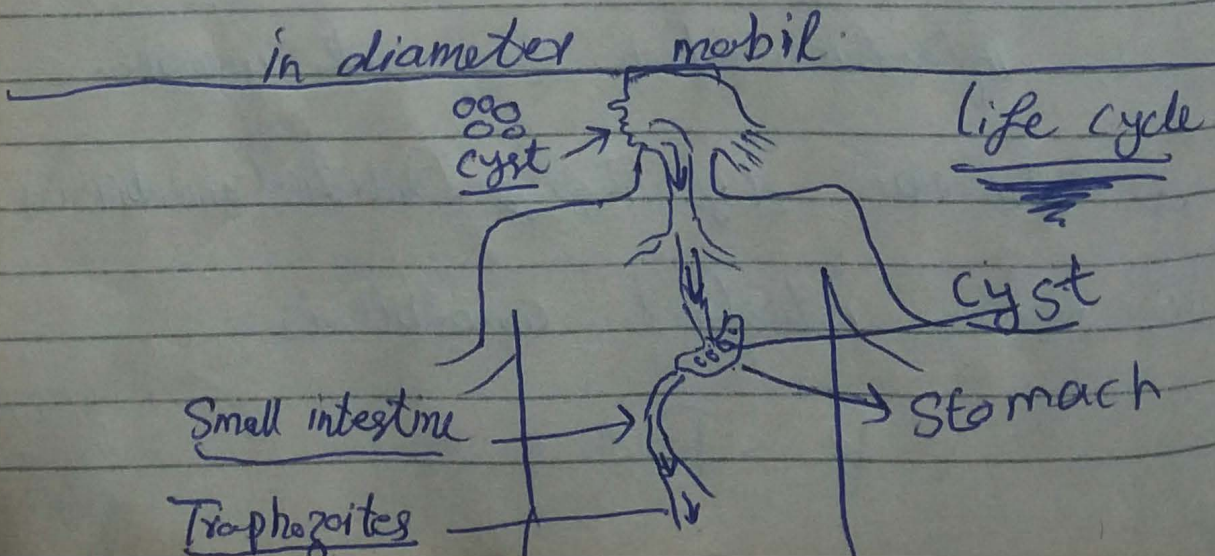
a) Cyst form

b) Trophozoite form.

→ cyst form are naturally infective and spherical in shape.

⇒ Trophozoite form are amoeba like shape and 18-30 μm

in diameter mobil.



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Life cycle's

(i) \Rightarrow when any harmful substance as cysts enter through the mouth

\Rightarrow cyst come to the stomach

\Rightarrow they resistance to the environment of stomach and then passes to the small intestine.

(ii) In Small intestine each cyst divide to produce 8 trophozoites in the small intestine.

(iii) So in the small intestine these trophozoites then go to large intestine as in colon.

\Rightarrow In the large intestine they start colonization.

\Rightarrow So now these two types of

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infection is caused by it. are as
under

(i) Invasive Infection and (ii) Non Invasive Infection

⇒ Invasive infection occur 10%
and in serious condition.

⇒ Non invasive infection occur 90%
and not severe.

4: So in non invasive ^{infection} case the
histolical trophozoites will go
on ~~mucos~~ layer surface.

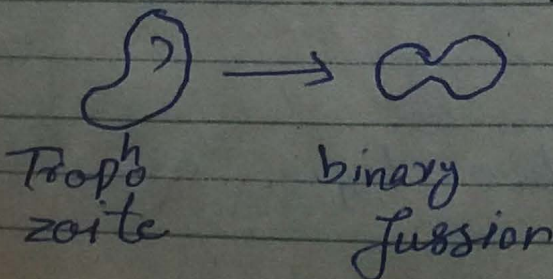
⇒ multiplying in binary fusion

⇒ and then ^{start} colonization to form

new cyst.

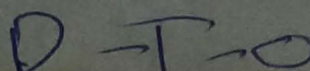
Histolytica
trophozoites

Colonic
epithelial
cells of
large intestine



cyst

mucos layer
epithelial cell
(cysts)



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St. these trophozoites produce a lot of cyst.

⇒ It is called non invasive infection which does not invade the colon cells.

⇒ The stools which excrete the cyst from the body.

⇒ Now it infects new human due to contamination of drinking water.

⇒ In non invasive ^{infection} it causes mild diarrhoea and abdominal discomfort due to these

trophozoites living as asymptotically in the human body.

(5) In invasive infection case the trophozoite invades and colonizes the epithelial cells.

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⇒ this will cause the epithelial cells and then to die.

⇒ which will create the ulcer in the large intestine.

⇒ They will cause further damage through lysing. when the neutrophil will response to the invasion.

as lead to ulcer.

⇒ The epithelial will start creating ulcer in the large intestine.

⇒ The trophozoites will move toward the blood stream after the colon cell and mucus membrane damaging. in the large intestine.

6) The trophozoites can target other organs after the ^{entering} ~~creating~~ of

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this in blood.

So, In invasive Infection these ~~can~~

trophozoites ^{can} infect the other

site such as liver, lungs and

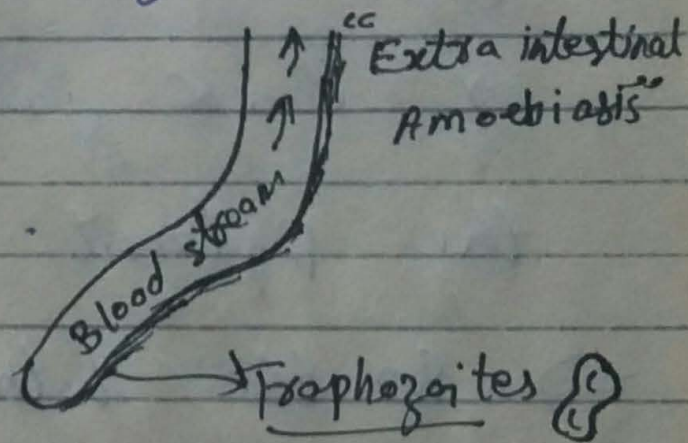
brain ~~due to~~ through the

blood stream.

and so on.

lab diagnosis:-

Fecal Examination of
cyst.



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Q4:- Diagnosing of *Trypanosoma Cruzi*
in laboratory.

Ans-

Here we have acute disease which diagnosed by the demonstrating of trypomastigotes presence in thin or thick films of the blood of the patient.

⇒ So the both films are stained and wet in which examined ~~the~~ is prepared. the latter for motile organism.

⇒ Because the trypomastigotes are not numerous in the blood.

⇒ They may be required the other diagnostic method, namely

(i) A stained preparation of a bone

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marrow aspirate or muscle biopsy.

specimen (which may reveal amastigotes)

(ii) On special medium the organism culture.

and so on.

Q5:- Leishmania species names:-

- i) Leishmania Braziliensis.
- ii) Leishmania tropica
- iii) Leishmania mexicana.
- iv) Leishmania donovani.

Clinical finding:-

⇒ At the bite site initially the cutaneous leishmaniasis lesion is a red papule which is usually exposed extremity.

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- ⇒ They slowly to form multiple satellite nodules by this enlarges but coalesce and ulcerate.
- ⇒ With a competent immune system a single lesion that heals in patients spontaneously.
- ⇒ These ^{are the} slowly lesions.
- ⇒ The nasal cartilage is destroyed by ulcerating lesions but they do not adjacent the bone.
etc.