Expt: 13 Common disease causing organisms

Entamoeba histolytica

Systematic Position:

Phylum: Protozoa

Class: Rhizopoda

Type: *Entamoeba histolytica*

Identification:

The given slide is identified as *Entamoeba histolytica*.

Identification Features of Entamoeba:

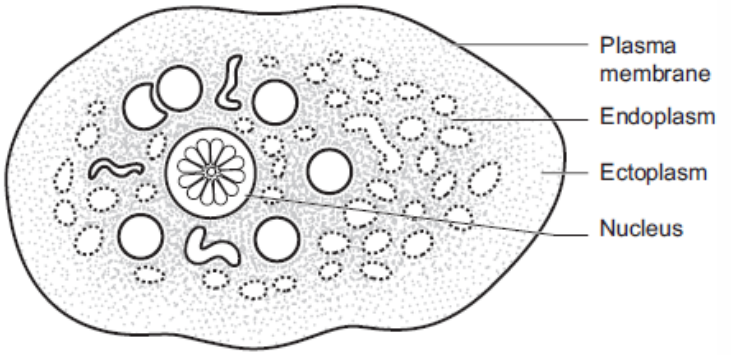
Entamoeba is an endoparasitic protozoan which causes amoebiasis or amoebic dysentery.

It lives in the lumen of the large intestine and feeds on the epithelial cells.

The infective stage of this parasite is trophozoite.

Symptoms:

The symptoms of amoebiasis is are ulceration, bleeding, abdominal pain and stools with excess mucous.



Ascaris lumbricoides

Systematic Position:

Phylum: Aschelminthes

Class: Nematoda

Type: *Ascaris lumbricoides*

Identification:

The given slide is identified as *Ascaris lumbricoides*.

Identification Features of Round worm:

Body long (20 to 40 cm), cylindrical (5 to 6 mm diameter) with no segmentation.

Sexes are separate; the females are longer than the males.

Both the ends are pointed; posterior end of male is ventrally curved.

Mouth is situated at the anterior end, and is surrounded by three lips, one present middorsally and rest two lips are situated ventrolaterally.

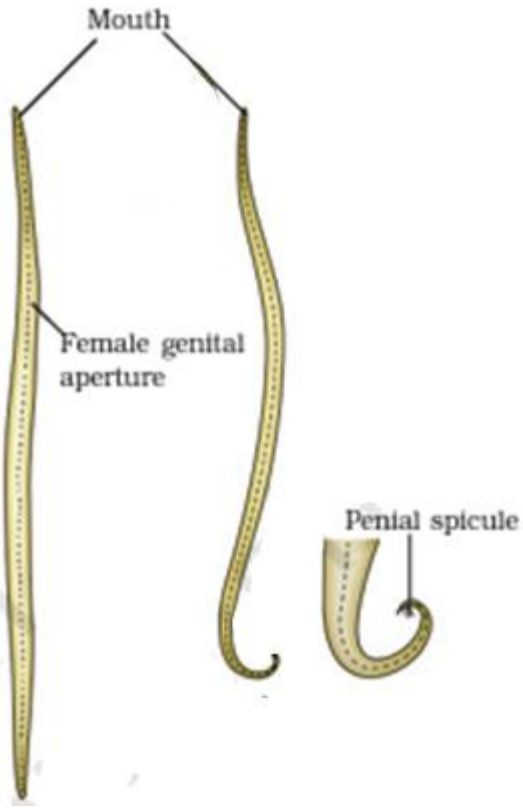
Excretory pore is present on the ventral surface slightly behind the anterior end.

In addition to the ventrally curved posterior tip, the male worm has a pair of penial spicules very close to the cloacal opening.

In case of female, a female genital aperture is present mid-ventrally about one third distance from the anterior end.

Symptoms:

(a) Irregular bowel, (b) Occasional vomiting, (c) Anaemia.



Plasmodium vivax

Systematic Position:

Phylum: Protozoa

Class: Sporozoa

Type: Plasmodium vivax

Identification:

The given slide is identified as *Plasmodium vivax.*

Identification Features of Plasmodium:

It is an intracellular endoparasite seen easily within the RBC of the infected person.

It is unicellular.

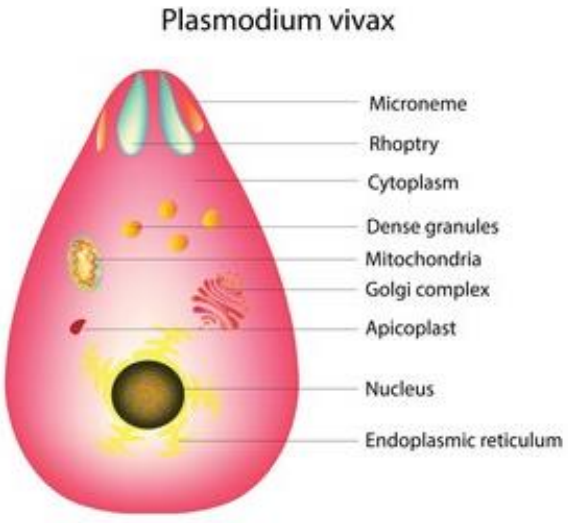
The most diagnostic stage of the parasite is "signet ring" stage in the erythrocytes, within which it appears as a rounded body.

It has a big vacuole inside, and the cytoplasm is accumulated at one place containing the nucleus.

Because of the above-mentioned features, the parasite appears as a ring.

Symptoms:

Intermittent high fever with chills followed by profuse sweating at an interval of alternate days.



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