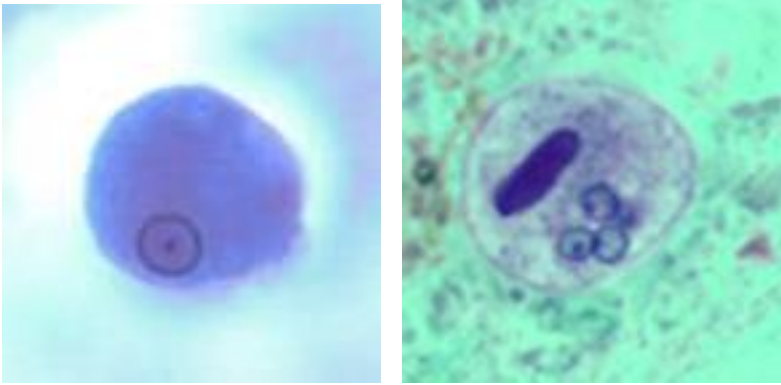


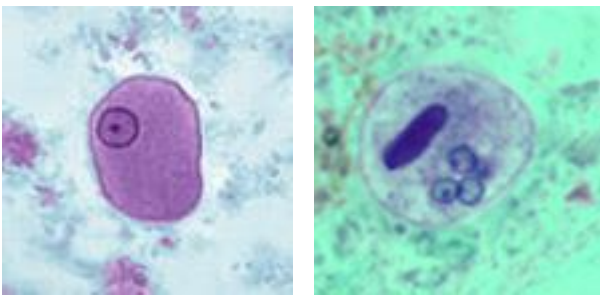
## Nonpathogenic Intestinal Protozoa

### Organisms:

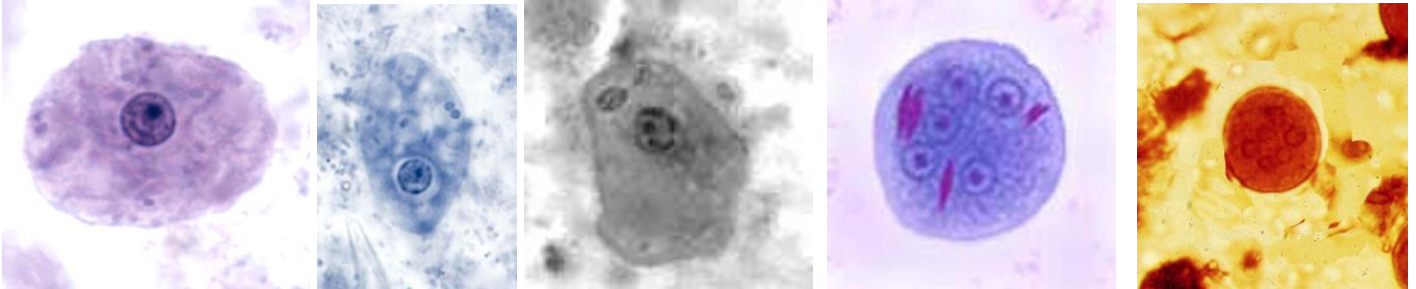
The following organisms belong to the amebae, are nonpathogenic, and cause no disease.



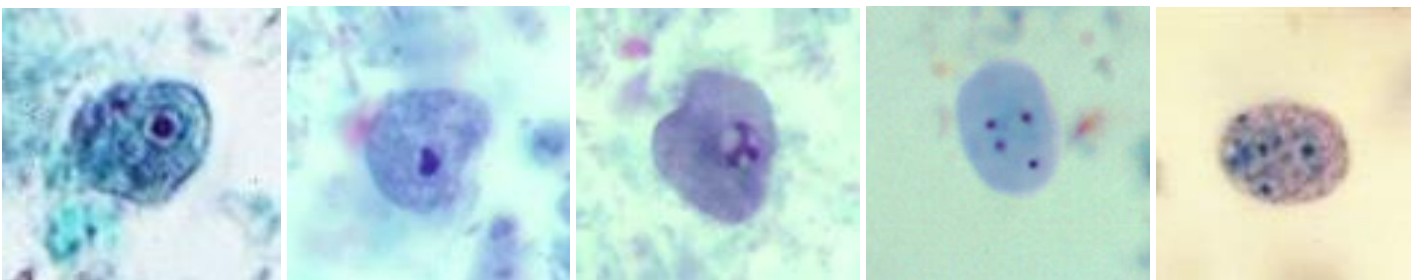
*Entamoeba dispar* (also resembles *E. moshkovskii*)



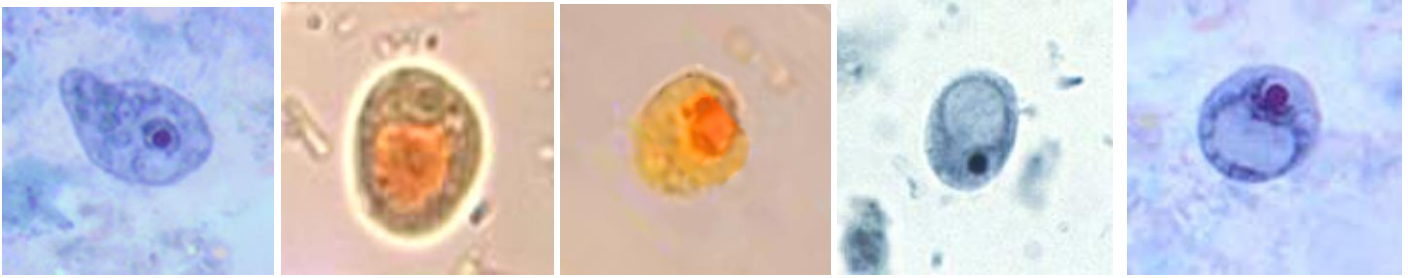
*Entamoeba hartmanni*



*Entamoeba coli*



*Endolimax nana*

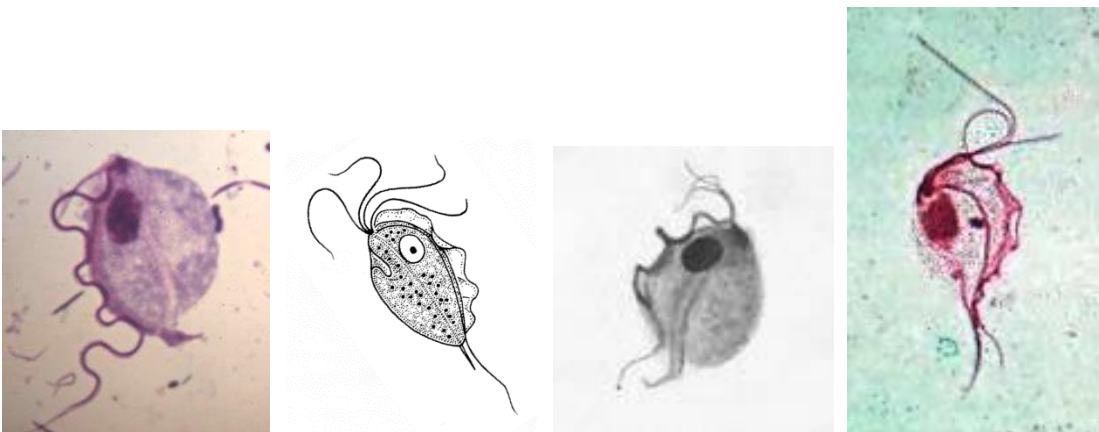


***Iodamoeba bütschlii***

The following organisms belong to the flagellates, are nonpathogenic, and cause no disease.



***Chilomastix mesnili***



***Pentatrichomonas hominis* – no cyst form known**

**Life Cycle:**

Intestine, organisms passed in feces

**Acquired:**

Fecal-oral transmission via cyst (or trophozoite in the case of *Pentatrichomonas hominis*) form; contaminated food and water

**Epidemiology:**

Worldwide, primarily human-to-human transmission

**Clinical Features:**

None

**Clinical Specimen:**

Intestinal: Stool

**Laboratory Diagnosis:**

Intestinal: Ova and Parasite examination (concentration, permanent stained smear); identification based on morphology

**Organism Description:**

Trophozoite: No nuclear chromatin, large karyosome, relatively clean cytoplasm (may contain some debris); tremendous nuclear variation (can mimic *Entamoeba hartmanni*, *Dientamoeba fragilis* and *Iodamoeba bütschlii*).

Cyst: May contain linear structures (pale), mature cyst contains 4 nuclei (rare to see two-nucleated stage).

**Treatment:**

None

**Control:**

Improved hygiene, adequate disposal of fecal waste, adequate washing of contaminated fruits and vegetables

**Comments:**

All nonpathogenic intestinal protozoa should be reported to the physician (organism genus, species, stage – trophozoite/cyst). If only nonpathogens are found, but the patient remains symptomatic, other organisms (pathogens) may be present and require additional testing.