

Tikrit University

College of Nursing

Basic Nursing Sciences



Second Year - 2023-2024

Microbiology

Entamoeba histolytica and Entamoeba coli

By: lecturer

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Entamoeba histolytica and Entamoeba coli

Classification:

Subkingdom: Protozoa;

Phylum: Sarcomastigophora;

subphylum Sarcodina

Classification of Entamoeba histolytica

Kingdom Animalia

Subkingdom Protozoa

Phylum

Sarcomastigophora

subphylum Sarcodina

Class Lobosea

Order Amoebida

Family Endamoebidae

Genus : Entamoeba

Species : histolytica

Classification of Entamoeba coli

Kingdom Animalia

Subkingdom Protozoa

Phylum Sarcomastigophora

subphylum Sarcodina

Class Lobosea

Order Amoebida

Family Endamoebidae

Genus : Entamoeba

Species : coli

Trophozoites:

Entamoeba coli

15 mm - 40 mm in size

Multiple pseudopodia

Non directional motility

No ingested erythrocytes

Cytoplasm rough looking

Large, eccentric karyosome

Clumped nuclear chromatin

Genus : Entamoeba

Species: histolytica

Entamoeba histolytica

10 mm - 35 mm size

Single pseudopodia

Unidirectional motility

Ingested erythrocytes (RBC)

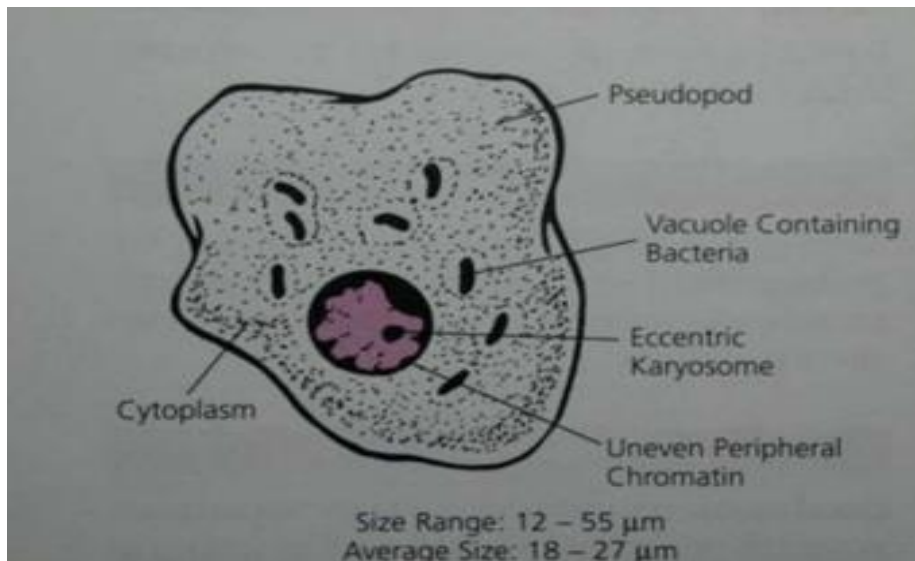
Finely granular cytoplasm

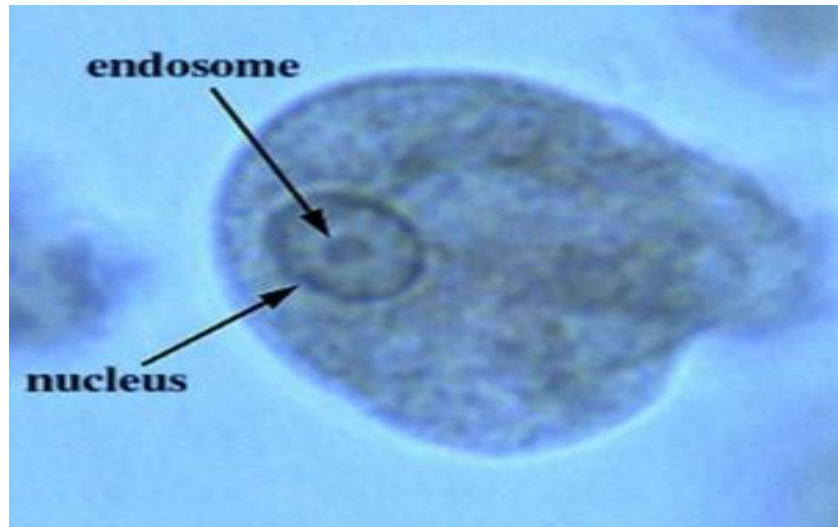
Small, central karyosome

Finely beaded chromatin

Genus : Entamoeba

Species: coli





Cysts

Entamoeba coli

10 mm - 35 mm in size

May have 8 nuclei

Karyosomes eccentric

Nuclear chromatin clumped

Splintered chromatoidal bars

Entamoeba histolytica

10 mm - 20 mm in size

Never more than 4 nuclei

Karyosomes small, central

Chromatin finely beaded

Rounded chromatoidal bars



Subkingdom: Protozoa

Phylum: Sarcomastigophor

Subphylum: Mastigophora

Taxonomical Classification of Giardia lamblia

Kingdom Protista

Subkingdom Protozoa

Phylum Sarcomastigophora

Subphylum Mastigophora

Class Zoomastigophora

Order Diplomonadida

Family Hexamitidae

Genus Giardia

Species lamblia

Giardia lamblia

It is the most common flagellate of the intestinal tract.

considered as one of the most common cause of infectious diarrhea throughout the world.

Geographical Distribution: Worldwide (tropical and subtropical region)

Humans are the only important reservoir of the infection.

Causes Giardiasis, also called “traveler’s diarrhea” or “beaver fever”

Morphology: exhibit the trophozoite and cyst .

