Entamoeba coli

Introduction

Entamoeba coli is a non-pathogenic amoeba with worldwide distribution. Its life cycle is similar to that of E. histolytica but it does not have an invasive stage and does not ingest red blood cells.

Morphology of Cysts

Cysts of E. coli are 15 - 30µ in diameter and contain 1 - 8 nuclei. Chromatoid bodies are not frequently seen but when present they are usually splinter-like with pointed ends. Glycogen is usually diffuse but in young cysts is occasionally found as a well-defined mass which stains reddish brown with iodine.

Morphology of Trophozoite

The trophozoite is larger than that of E. histolytica ranging from 15-50µ in diameter. It exhibits blunt pseudopodia with sluggish movement. A permanently stained preparation shows a nucleus with a moderately large eccentric karyosome with the chromatin clumped on the nuclear membrane. The cytoplasm appears granular containing vacuoles with ingested bacteria and other food particles.

Laboratory Diagnosis

Laboratory diagnosis is made by finding the characteristic cysts in an iodine stained, formol-ether concentration method or by detecting the characteristic trophozoites in a wet preparation or a permanent stained preparation.

A cyst of Entamoeba coli