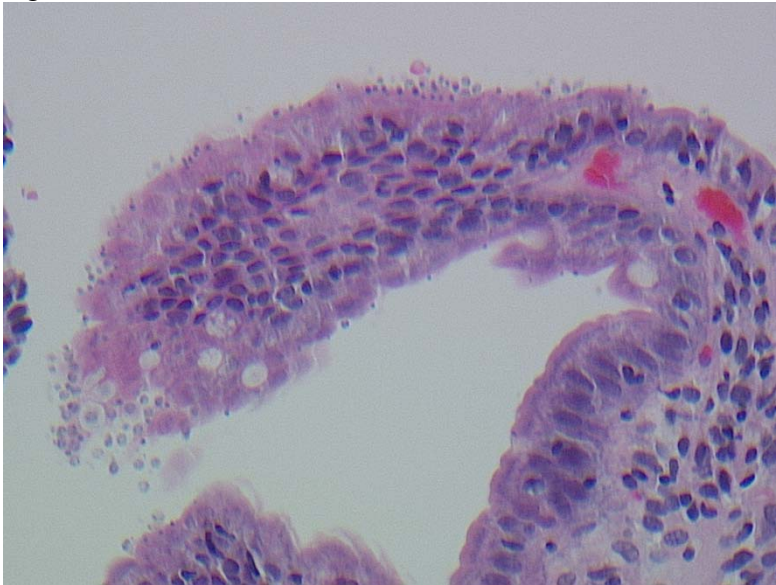


#### Question 4 – Week of August 27

A 42 year old African American man with HIV presents with abdominal cramps, watery diarrhea and low grade fever for the last 3 weeks. Patient has now developed right upper quadrant pain. Endoscopy with biopsies were performed. The histology is shown in Figure 1. What is the most likely diagnosis?

- A. Cryptosporidiosis
- B. Microsporidiosis
- C. Giardiasis
- D. Campylobacter infection
- E. Isosporiasis

Figure 1:



(Courtesy of Julian Perez, MD Gastroenterology department, Ronald Miick, MD Pathology department. Albert Einstein Medical Center, Philadelphia)

#### Answer: A

Written explanation of answer: The biopsy of the small intestine shows the parasite projecting from the brush border of the mucosal surface. Cryptosporidiosis causes a self-limited diarrheal illness in healthy individuals and a persistent diarrhea in persons with AIDS. An infected individual develops watery diarrhea, which may be associated with abdominal cramps and a low-grade fever. Biliary tract involvement is seen in persons with AIDS who have very low CD4 cell counts may include acalculous cholecystitis, sclerosing cholangitis, papillary stenosis, or pancreatitis. All are associated with right upper quadrant pain, nausea, and vomiting.

#### References:

1. White AC Jr. Cryptosporidiosis (*Cryptosporidium hominis*, *Cryptosporidium parvum*, other species). In: Mandell GL, Bennett JE, Dolin R, ed. *Principles and Practice of Infectious Diseases*. 6<sup>th</sup> ed. Philadelphia, PA: Elsevier Churchill Livingstone; 2005:3215-3228.
2. Bushen OY, Lima AA, Guerrant RL. Cryptosporidiosis. In: Guerrant RL, Walker DH, Weller PF, eds. *Tropical Infectious Diseases*. Philadelphia, PA: Elsevier-Churchill Livingstone Principle, Pathogens, and Practice; 2006:1003-1014.