

Case 2 - Ensari

- 19 year-old female
- BMTx (Dx: AML) 6 wks ago
- Watery diarrhoea, abdominal cramps, vomiting
- CMV serology negative

Graft-versus-Host Disease

- Acute GVHD occurs in 17-78% of BM tx patients
- Leading cause of treatment failure in low grade malignancies
- Involves GI, skin and/or liver
- Nonspecific GI symptoms
- Limited to upper or lower GI in 1/3
- Lower GI GVHD more easily diagnosed than upper GI GVHD

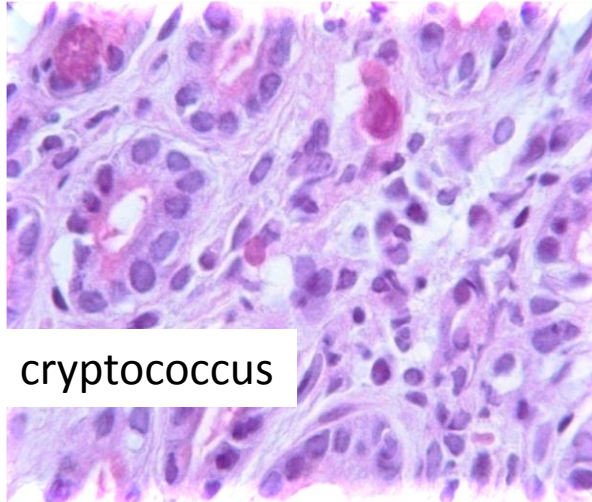
Differential diagnosis

- Drugs
 - Bowel preps
 - NSAIDs
 - Mycophenolate mofetil
- Infections (CMV/cryptosporidium) - can be superimposed!
- Ischaemia
- Chemo/radiotherapy effect
- IBD

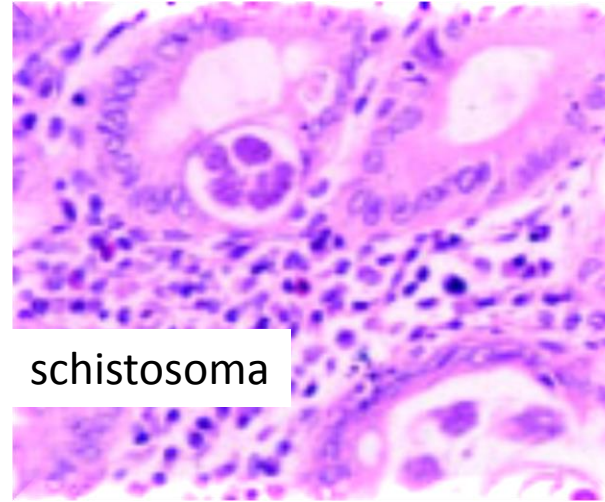
Cryptosporidium

- 2-6 μ m protozoan related to other coccidian parasites
- Opportunistic infection - common in AIDS patients
- Fecal-oral spread
- Predominantly small intestine & colon but entire GI may be involved
- Tiny blue dots on the epithelial surface covered by a layer of cell membrane (evident on EM)
- Grocott (+)
- Apoptosis and crypt cell necrosis may be seen

Infections



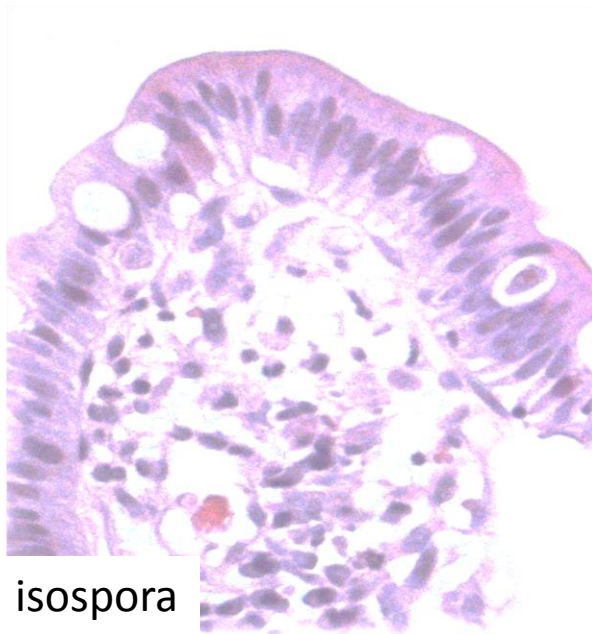
cryptococcus



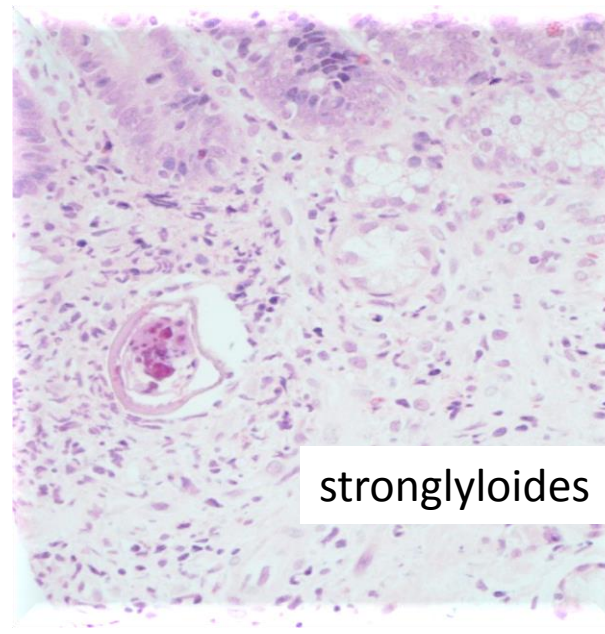
schistosoma



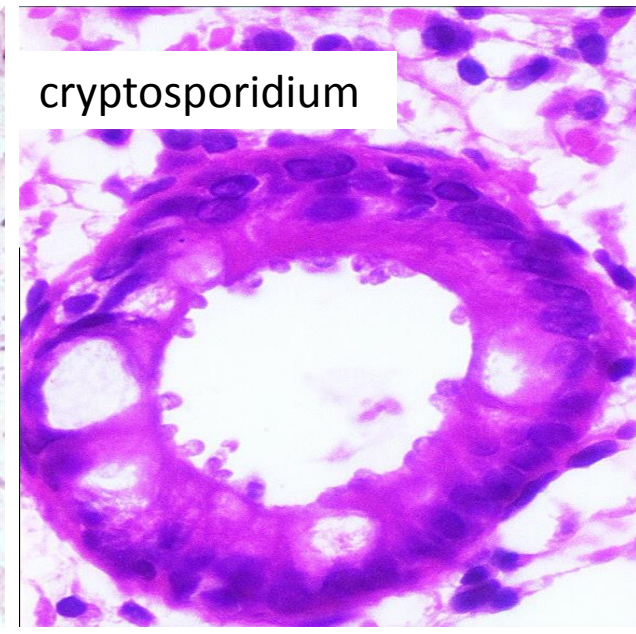
microsporidium



isospora



strongyloides



cryptosporidium

Case 4 - Ensari

- 53 year-old female
- Dx as Crohn's disease in 2017
- Chronic diarrhoea and anaemia for 8 mo
- enteric-coated diclofenac tablets 50 mg three times daily + Aspirin - past 2 years for chronic backache
- Colonoscopy: isolated ulcer in TI and thickening of the wall with luminal narrowing
- Attacks of low-grade bowel obstruction
- Emergency operation: partial ileocelectomy

NSAIDs

- Inflammatory ulcerating/perforating lesions in intestines
- Ulcers may resolve to form strictures in the form of "diaphragm-like" changes
- Multiple ulcers and strictures in the ileum mimicking Crohn's disease
- Microscopic colitis
- Colonic left side increase in eosinophils

Diaphragm disease

- NSAID-induced strictures were first described in 1989
- Incidence of DD \approx %2 in long-term NSAID users
- Other conditions that can result in diaphragm disease include potassium intake, coeliac disease, eosinophilic gastroenteritis, and radiation injury AJR 2014; 202:W140-W145
- These strictures are predominantly seen in terminal ileum and proximal ascending colon, but can occur anywhere along the length of small or large bowel Dig Liver Dis 2006; 38: 276-8
- Each diaphragm consists of plica-like structure consisting of mm and submucosa with collagenized fibrosis
- Mucosa may show inflammatory changes of varying degrees
- Later the diaphragm may become dome shaped

Case 6 - Ensari

- 41 year-old male
- Fever, diarrhoea and abdominal pain for 6 mo
- Arthralgia unresponsive to NSAIDs
- Mesenteric LAP in abdominal CT

Whipple's Disease

- Rare bacterial infection caused by *Tropheryma whippelii*
- Underlying defect in T lymphocytes? HLA-B27 association?
- Endoscopy: thickened folds coated with yellow-white plaques
- Histology: Massive infiltration of the lamina propria (rarely submucosa) with pale-blue foamy macrophages - PAS +
- Mild-moderate villous abnormality
- Small collections of fat in lamina propria («lipodystrophy») due to obstruction of lacteals and lymphatics
- Diff dx: MAI (ZN+)
- Tx: trimethoprim-sulphamethoxazole (relapses do occur, macrophages may persist for years)