# 10/13/23 Morning Report with @CPSolvers

*"One life, so many dreams" **Case Presenter**: Maddy (@MadallenaC) **Case Discussants**: Rabih (@rabihmgeha) and Reza(@DxRxEdu)*

**CC**: Diarrhea

**HPI**: 29 yo man PMHx of HIV with frequent watery stools for 4 days. One month prior CD4 was 24 and VL was 265.000. These 4 days of frequent watery stools are an acute worsening of more chronic leakage. Rectal lacerations and repair 1 year ago - since then, intermittent incontinence and pain. He was able to avoid constant incontinence until the last 4 days when symptoms worsened and he came to the ED. Diarrhea not associated with food intake, is constant and have been waking him up during the night. ROS: fatigue, 30 lbs wt loss over the last month, adb pain. Denies blood stools, chest pain, joint pain. Two past admissions: 1) 1 year ago - rectal laceration (colonoscopy w/ moderate colitis continuously from rectum to the mid-transverse colon)
2) 7 months ago - large rectal ulcer of unclear etiology, biopsy: Hyperplastic features, ulceration with granulation tissue and focal area of vasculitis.

**PMH**: HIV diagnosed 10 years ago - on and off on therapy
Esophageal candidiasis 1 year ago

**Meds**:
Tenofovir + Dolutegravir + Emcitribanine - not taking for one month

**Fam Hx**: unremarkable
**Soc Hx**: Born in San Francisco, assistant with cleaning in a SF
**Health-Related Behaviors**:
Heroin once a day
Not sexual active
Consumes alcohol daily
**Allergies**: no known allergies

**Vitals: T:**37.4 **HR:**92 **BP:** 147/80 **RR:** 100 RA
**Exam:**
**Gen:** Lethargic, uncomfortable, chronically ill appearing
**HEENT:** clear oropharynx, without exudates, no lymphadenopathy
**CV:** no murmurs
**Pulm:** clear to auscultation
**Abd:** bowel sounds present, soft, nontender, nondistended
**GU:** possible external hemorrhoid or small red mass emerging from rectum, constant fecal leakage from the rectum
**Neuro:** No focal deficits
**Extremities/skin:** no rashes or edema

**Notable Labs & Imaging**:
**Hematology**: WBC:5 normal differentiation Hgb: 8.3 Plt: 345 MCV 62 MHC 18 MCHC 29 ESR 130 CRP 37
**Chemistry**: Na:133 K: 3.9 Cl: 105 BUN:19 Cr: 0.81 glucose: 98 Ca:8.6 Mag: 1.6
CD4 58 viral load 550.000
Tox: positive for amphetamines, fentanyl, opiates
Blood cultures: negative / Stool GI pathogen panel: negative; Stool O&P (cryptosporidium, cyclospora, isospora): negative / Cryptococcal antigen, HSVs, TB, C. diff: negative CMV IgG >10, IgM 37.9 (<30)
**Imaging**: CXR: clear
**CT**: mass involving the R aspect of the lower rectum extending to the anal verge, prominent perirectal and bilateral inguinal lymph nodes, splenomegaly
**EUS**: abnormal lymph nodes in the perirectal region
**Coloscopy**: single solitary ulcerated mass in the rectum and in the distal rectal abbuting the anal verge. No colitis in proximal colon.
**Biopsy**: Colon random: unremarkable
**Colon mass biopsy:** ulcerated mucosa w/ scattered large cells often in the endothelium, brightly eosinophilic intranuclear and cytoplasmic inclusions. No dysplasia or carcinoma. Bacterial, fungal and AFB: negative
**Immunohistochemical** staining for CMV was positive for organisms -> CMV pseudotumor -> treated with ganciclovir -> Valganciclovir
Microsporidia PCR returned positive

**Dx: CMV pseudotumor with microsporidia**

**Problem Representation**: 29 yo man w/ PMH of HIV and CD4 of 24 presenting with 4 days of worsening diarrhea after two previous ED admissions in the last year due to GI symptoms.

**Teaching Points (Ximena)**:
Patients with HIV are at risk of opportunistic infections, but also common infections presented more frequently and more severely.
Remember the nature of HIV impact on immune response to classify the diarrhea in inflammatory and non-inflammatory.
→ Herpes, CMV, non tuberculosis bacteria, parasites, Cryptosporidium are considerations on patient with low CD4 count.
Inflammation + ulcer → makes us think if the inflammation was the cause of the ulcer or there's another underlying process
GI malignancies affect more often to patients with HIV → Kaposi
Inflammatory disorders either associated to HIV or common disorders.
Consider infections, specially testing the ones that are known to be difficult to diagnose.
Colitis→ intraluminal vs extraluminal
Mass raises suspicion of opportunistic malignancy. In the context of HIV, malignancy should be considered and evaluated.
In patients with low CD4 is helpful to be open to multiple possibilities: a syndrome causing all of the manifestations or multiple disease processes happening at the same time.
Consideration: Acute worsening of a chronic process vs an unknown chronic process with another acute problem.
Due to the splenomegaly and multiple lymph nodes, consider infection on the reticuloendothelial system → acute (mono, CMV) vs chronic granulomatous infections (TB and Histoplasmosis). Overlap with the ones that can go to the GI. Important to think about the possible portal entry
Other diagnostic considerations are syphilitic colitis and chlamydia infection disseminated from the rectum. Remember that a negative CMV PCR doesn't rule out the disease, we need the histopathology.
Evolution of the mass: time was faster that expected. Presence of the ulcer can be due to vascular or neuropathic process. The presence of HIV can contribute to cancers behaving unusually.
**PEARL:** McKittrick–Wheelock syndrome includes colorectal tumor, chronic diarrhea and electrolyte imbalance.
VZV and CMV overlap with vasculitis is high.