Wrap It Up – Sexually Transmitted Primary Cytologmegalovirus Proctitis In Immunocompetent Host: A Case Report

Vanessa Nwaokocha
Brinton Clark
Ronald Dworkin

Follow this and additional works at: https://digitalcommons.psjhealth.org/ppmc_internal
Part of the Internal Medicine Commons
Case Presentation

- A 26-year-old bisexual man presented with fever, malaise, rectal pain, and rectal bleeding 24 hours following anal foreign body insertion
- He initially denied anal receptive intercourse but later admitted to unprotected anal intercourse 3-4 weeks prior

First Admission

- **Physical Exam:** Afebrile with normal vital signs
- **Labs:** CBC, CMP normal, stool pathogen, rectal gonorrhea and chlamydia negative
- **CT Abdomen and Pelvis:** mild perirectal stranding without evidence of extraluminal air
- **Received two doses of Zosyn**

Second Admission

- **Physical Exam:** Febrile 102, HR 108
- **Labs:** WBC 6.6, Atypical lymphocytes 22%, ALP 173, AST 72, ALT 146
- **CT Abdomen and Pelvis:** ongoing perirectal stranding, rectal wall thickening, and several enlarged perirectal lymph nodes
- **Syphilis, HIV Ab and RNA** were negative
- **Started on valacyclovir** given concern for viral proctitis
- **Flexible sigmoidoscopy** showed severe ulcerative proctitis extending 15cm into the rectum
- **Immunohistochemical staining negative** for HSV but positive for CMV
- **Viral culture positive** for CMV
- **Serum CMV IgM, IgG, and DNA** positive with viral load of 11,000 copy/mL
- **Patient discharged on 14 day course of ganciclovir**

Differential Diagnosis for Proctitis

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gonorrhea</td>
<td>Chlamydia (including LGV)</td>
</tr>
<tr>
<td>Syphilis</td>
<td>Inflammatory Bowel Disease</td>
</tr>
<tr>
<td>HSV</td>
<td>CMV</td>
</tr>
</tbody>
</table>

Endoscopic View of Ulcerative Proctitis

Histology of CMV showing Inclusion Bodies

Discussion

- Proctitis is defined as inflammation of the distal 10-12cm of the rectum
- Symptoms include rectal bleeding, rectal pain, anorectal itching, cramps/tenesmus, or discharge from the anal canal
- Infectious causes are most common, followed by inflammatory bowel disease
- Sexually transmitted causes include chlamydia, gonorrhea, syphilis, and HSV
- Immunocompromised patients are at higher risk for CMV procto-colitis. Perform HIV testing.
- Though rare, primary CMV can cause proctitis in immunocompetent hosts and has been reported in persons who engage in unprotected anal intercourse, especially MSM
- Over 90% of MSM test positive for CMV compared to 54% of heterosexual men
- CMV infection is transmitted via bodily fluids including saliva, urine, blood, tears, breast milk, and semen, and is characterized by prolonged excretion of CMV in semen
- In immunocompetent hosts, CMV is typically asymptomatic
- Diagnosis is suggested by detection of CMV IgM, a four-fold increase in CMV IgG done 2-4 weeks apart, atypical lymphocytes, elevated LFTs, and sigmoidoscopy showing rectal mucositis or ulcerations
- Confirm with biopsy showing inclusion bodies or intranuclear inclusions and immunohistochemical staining positive for CMV
- Most cases resolve without anti-virals

Key Points

- CMV is an unusual cause of proctitis and should be considered in those who have unprotected anal intercourse, especially if common causes have been ruled out
- Diagnosis should be confirmed with biopsy and immunohistochemical staining
- The triad of mononucleosis like illness with rectal bleeding shortly after unprotected anal intercourse suggests sexually transmitted CMV proctitis

References