Double Trouble: A Case of Co-Infection With Campylobacter and Giardia in a HIV-Positive Patient

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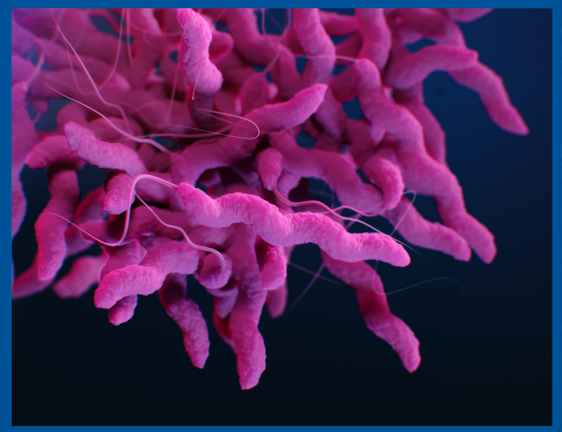
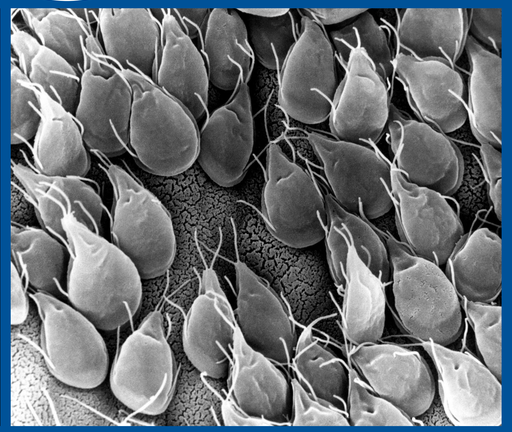
Background

- Patients in immunosuppressed states are at increased risk for opportunistic infections including infectious diarrhea.
- Uncontrolled HIV is a common etiology for opportunistic diarrheal infections.
- This case highlights a patient with uncontrolled HIV who presented with co-infection with giardia and campylobacter through an underrecognized transmission route.





Case Presentation

- A 45-year-old transgender male to female patient with a past medical history of poorly controlled HIV infection not actively on antiviral therapy and chronic Hepatitis B infection presented with initial complaint of acute diarrhea for one weeks duration.
- Patient also complained of diffuse, painful, pruritic rash for five days.
- Patient recently returned from Miami, where she reported multiple sexual partners with recent unprotected oral and anal intercourse.
- Patient was admitted to hospital medicine service for further management.

Hospital Course

- Patient was initially tachycardic, febrile to 104.8, with generalized abdominal tenderness and diffuse macular rash including palms and soles.
- She was admitted and started on acyclovir, vancomycin and ceftriaxone.
- Comprehensive stool panel was positive for both campylobacter and giardia.
- Patient was noted to have CMV viremia, a HIV viral load of 38,000, and a positive RPR.
- Infectious disease (ID) was consulted and the patient was treated with a single dose of tinidazole and two doses of metronidazole followed by a 7-day course of ciprofloxacin.
- Diarrhea resolved, and patient was restarted on antiretroviral therapy, completing a 14-day course of penicillin for her syphilis. She was discharged home with close follow up with ID.

Discussion

- Patients are at increased risk of opportunistic infections in the setting of poorly controlled HIV and unprotected sexual intercourse.
- Clinicians need to have a high index of suspicion for more rare and severe diarrheal illness in immunocompromised patients, but cannot overlook common etiologies.
- Campylobacter and giardia are two frequently associated foodborne illnesses, most commonly through fecal-oral transmission or contaminated water. Another more underrecognized route of transmission, however, is high risk sexual contact such as via unprotected oral-anal sex.
- In addition to compliance with HIV treatment, patients should be counseled on and consider barrier methods during receptive anal and oral sex to prevent sexual transmission of such diarrheal illnesses.

Conclusion

- This case highlights the importance of keeping a broad differential of infectious causes of diarrhea, especially in the immunocompromised population.
- Clinicians must ask focused questions to discern important risk factors.
- It further highlighted is the need to educate high risk patients about different transmission mechanisms of infectious diarrheal disease to help promote awareness.

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