Beyond the Rash: Acute Human Immunodeficiency Virus Infection Masquerading as Measles

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LEARNING OBJECTIVES

- Recognize acute human immunodeficiency virus (HIV) infection as a potential cause of a measles-like illness.
- Evaluate for concurrent sexually transmitted and enteric infections and initiate antiretroviral therapy promptly.

CASE PRESENTATION

A 29-year-old man recently released from incarceration with a history of sex with men presented with three weeks of fever, chills, upper respiratory symptoms, abdominal pain, vomiting, diarrhea, poor oral intake, and a progressive morbilliform rash. He had previously been discharged from the emergency department with a presumed viral illness. Examination demonstrated dehydration, pharyngitis, diffuse lymphadenopathy, and a generalized morbilliform rash. Imaging revealed mild colitis. The clinical presentation of this patient with unclear vaccination status raised concern for measles, prompting airborne isolation and Infectious Disease consultation.

KEY FINDINGS

Acute HIV: new diagnosis with CD4 count 252 cells/mm³, CD4 percentage 21%, and CD4:CD8 ratio 0.57.

Measles excluded: negative measles IgM allowed discontinuation of airborne precautions.

Coinfections: *Campylobacter* enterocolitis and rectal gonorrhea.

Treatment: azithromycin, ceftriaxone, and bictegravir/emtricitabine/tenofovir alafenamide after resistance testing.

Outcome: Gastrointestinal symptoms and oral intake improved. The patient elected a patient-directed discharge but continued follow-up in the Infectious Disease clinic.

DIAGNOSTIC WORKUP	
HIV testing	New HIV diagnosis, consistent with acute retroviral syndrome
CD4 count	252 cells/mm³
CD4 percentage	21%
CD4:CD8 ratio	0.57
Measles IgM	Negative
Enteric testing	*Campylobacter* identified
Rectal testing	Gonorrhea identified

CLINICAL IMAGES



Figure 1. Diffuse morbilliform eruption involving the posterior trunk.



Figure 2. Cutaneous eruption involving the upper extremity.

DISCUSSION

Acute HIV can mimic common viral illnesses, including measles. Symptoms typically begin two to four weeks after infection. Among symptomatic patients, fever occurs in approximately 80%, rash in 51%, nausea in 49%, diarrhea in 46%, pharyngitis in 44%, and lymphadenopathy in 39%.

Concurrent *Campylobacter* enterocolitis and rectal gonorrhea complicated the presentation and could have obscured the underlying diagnosis. Patients with suspected acute retroviral syndrome warrant comprehensive testing for sexually transmitted and enteric infections.

Early recognition permits timely antiretroviral therapy, supports immune recovery, reduces transmission risk, and improves linkage to care.

CONCLUSION

Consider acute HIV when fever, morbilliform rash, pharyngitis, lymphadenopathy, and gastrointestinal symptoms occur together.

Use epidemiologic risk factors to broaden the differential even when another viral diagnosis appears plausible.

Test for concurrent sexually transmitted and enteric infections and establish rapid linkage to HIV care.

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