

## Case History

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A 21 year old male graduate student presented to the emergency department in June 2007 one week following a three-week trip to Costa Rica with complaints of 10 days of fever (to 104°F) associated with frontal headaches, arthralgias and myalgias. His symptoms began while in Costa Rica. The patient noted his fevers tend to occur more frequently at night, are associated with sweating, and are relieved with acetaminophen. He notes fatigue, but denies abdominal pain, nausea, vomiting, melena, hematochezia, diarrhea, cough, sore throat, dyspnea, chest pain, dysuria, penile discharge or lesions, change in mentation, vision changes, photophobia or rash. He noted both arthralgias and severe myalgias when his symptoms first started but these had resolved by the time of his presentation. He reported multiple mosquito bites during his recent trip, as well as bites attributed to both spiders and ticks. He initially was taking chloroquine but stopped during the last half of his trip.

### Past Medical History:

- ❖ Allergic rhinitis
- ❖ Mononucleosis 1.5 years prior to presentation
- ❖ Remote tonsillectomy

### Medications:

- ❖ None

### Allergies:

- ❖ Cefaclor causes hives
- ❖ Penicillin causes hives

### Social History:

- ❖ Graduate student, currently taking summer courses
- ❖ Occasional alcohol use (4-5 drinks/ week), no tobacco use, occasional marijuana use; denies IV drug use
- ❖ No tattoos
- ❖ Recent 3 week vacation in Costa Rica where he volunteered teaching schoolchildren; he went on multiple forest hikes but denies swimming in or drinking freshwater
- ❖ Bisexual with multiple unprotected sexual contacts in previous 6 months; his most recent sexual encounter involved male unprotected anal intercourse just prior to his trip to Costa Rica

## Physical Exam

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Vital signs:	BP: 135/75 mm Hg, Pulse: 97/minute, RR: 16/minute, T: 102.3°F, O2: 98% on room air
General:	Thin male in no apparent distress
HEENT:	Pupils equal, round and reactive to light; sclera non-icteric, normal conjunctiva; no oral lesions or petechiae, normal posterior oropharynx
Neck:	No nuchal rigidity; no lymphadenopathy
CV:	Tachycardic, regular rhythm, normal S1/S2, no murmur, rub or gallop
Lungs:	Clear bilaterally
Abdomen:	Normal bowel sounds, non-tender, non-distended, soft, no organomegaly
Rectal:	Heme negative brown stool
GU:	No penile lesions
Extremities:	Good peripheral pulses; no edema; no synovial thickening
Neurologic:	No focal deficits; negative Kernig's sign
Other:	No axillary or inguinal lymphadenopathy
Derm:	No rashes or other skin lesions

## Laboratory Studies

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Sodium 137 mmol/L, Potassium 3.7 mmol/L, Chloride 103 mmol/L, Bicarbonate 26 mmol/L, BUN 12 mg/dL, Creatinine 0.98 mg/dL, Glucose 112 mg/dL, Ca 8.7 mg/dL

WBC  $9.3 \times 10^9/L$  with 29% neutrophils, 67% lymphocytes, 3% monocytes, 1% eosinophils; few atypical lymphocytes present

Hemoglobin 13.9 g/dL, Platelets  $222 \times 10^9/L$

AST 61 U/L, ALT 54 U/L, AP 68 U/L, Bilirubin (total) 0.3 mg/dL

Urinalysis unremarkable

Blood cultures negative

HIV viral load negative

**Department of Internal Medicine  
Clinicopathologic Conference**

**Hospital Course**

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The patient was admitted to the internal medicine service for further work-up. A non-contrast head CT and PA and lateral chest radiograph were unremarkable. An abdomen and pelvic CT scan revealed mild hepatomegaly and splenomegaly. The patient remained hemodynamically stable over the course of the following day and was ultimately discharged to follow up with his primary care provider.

Shortly after discharge a test returned and a diagnosis was made.

*Protocol prepared by Michael Stevens, MD*



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**A 21 year old man with fever**

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**Case Presenter: Michael Stevens, M.D.  
Case Discussant: Richard Wenzel, M.D., M.Sc.**