

South American Tourist Case Report

Instructions

This case report is based on actual events that occurred in 1996. View the patient's history, physical exam, and lab results to gather critical information about the case. Using information found throughout the Epidemiology section of this course, analyze the report and provide responses to questions you will find throughout the section.

About this case report:

A 45-year-old American male tourist presented for medical care with a several day history of headache, myalgias, nausea, vomiting, and dizziness. Because of significant laboratory abnormalities, he was hospitalized in the critical-care unit with a preliminary diagnosis of viral hemorrhagic fever of undetermined origin. The day after admission, the patient began bleeding from his nose, mouth, catheter sites, and rectum. Despite intensive medical management, the patient died 6 days after admission. Yellow fever infection was confirmed post mortem through virus isolation from the patient's tissues.

Recent History

The patient returned from a 9-day trip to Brazil, where he visited jungle areas of Rio Negro and the Amazon near Manaus. He also participated in outdoor activities such as fishing, wading, and close observation of monkeys. At pre-travel consult, the patient was provided vaccination for hepatitis A and given malaria prophylaxis, which was taken. Yellow fever vaccination was recommended but not available at the clinic, and patient did not seek vaccination elsewhere.

Chief Complaints

1st visit (to emergency department) - Patient complained of headache, muscle pain, joint pains, chills. Patient treated with IV fluids and pain medications and then discharged.

2nd visit (3 days later) - Patient admitted to hospital with headache, nausea, vomiting, epigastric pain, dizziness, and abnormal laboratory test results for white blood count, platelets, and renal and hepatic function.

Physical Exam

Upon hospital admission, the patient had a temperature of 38.6°C (101.5°F), blood pressure of 102/74 mm Hg, was jaundiced, had an enlarged liver, and tenderness in the mid-abdomen.

Most Significant Lab Results During Hospitalization

- White blood cell count: 1,400/mm³ (decreased)
- Platelet count: 72,000/mm³ (decreased)
- Creatinine: 2.3 mg/dL (elevated)
- SGOT (liver transaminase): 19,025 U/L (elevated)
- Total bilirubin: 3.8 mg/dL (elevated)

Questions

1. Which signs and symptoms of yellow fever did the patient exhibit?
2. Which cities in Brazil could the tourist have visited without risk of contracting yellow fever?
3. The tourist is likely to have contracted yellow fever as a result of which transmission cycle?
4. In addition to yellow fever vaccination, what other preventive measures could the tourist have taken?
5. What is the best way to treat yellow fever?