A 59-year-old male was admitted to the hospital with a two-week history of fever, chills, cough and shortness of breath. He is a native of India who had been in the US for only 5 weeks. An internist had evaluated him previously and prescribed a fluoroquinolone antibiotic, which he had taken for three days without relief. The past medical history included hypertension, hypercholesterolemia, diabetes mellitus, myocardial infarction and coronary bypass surgery. On physical examination the temperature was 100.2°F with decreased breath sounds and rales over the right lung base on auscultation. The laboratory tests revealed a leukocyte count of 18.0/mm³ and AST of 87 IU/L, ALT 170 IU/L, AP of 211 IU/L and TB of 0.9 mg/dL. He was treated with intravenous gatifloxin (Tequin) for presumed pneumonia. The following day his condition worsened. In addition to right upper quadrant discomfort, he developed a fever of 103°F with chills and appeared toxic. Ultrasound of the abdomen showed a thickened gall bladder wall with pericholecystic fluid and a poorly differentiated mass in the left lobe of the liver. A CT scan was done to further differentiate the hepatic mass, which revealed an approximately 8 cm lesion with the density of fluid in the left lobe of the liver. A definitive diagnostic test was performed, and appropriate antibiotic coverage was started. He recovered and was discharged in seven days.

**Question 1:** What is the clinical diagnosis?

**Question 2:** What test would you order?

**Question 3:** What is the appropriate treatment?

**Question 4:** What is the take-home message?

*(answers and discussion on page 35)*

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**Figure 1.** Ultrasound of the abdomen.

**Figure 2.** CT of the abdomen.

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DISCUSSION

In the presence of persistent fevers and a lack of serologies this patient underwent CT guided drainage. The fluid appeared serosanguinous and fibrinous; culture for bacteria, ova and parasites were negative. Subsequently serologies revealed positive antibody and high titre to E. histolytica. His condition improved significantly after drainage and on metronidazole therapy (750 mg PO TID). A repeat CT scan showed decrease in the size of the lesion to 6 cm and he was discharged on metronidazole for one week, followed by 7 days of paromomycin.

Amoebic liver abscess, although uncommon in the U.S., should be suspected in immigrants from developing countries where amoebiasis is endemic or whenever a patient gives appropriate travel history. Among the extraintestinal manifestations of amoebiasis (brain abscess, lung abscess, cutaneous amoebiasis), liver abscess is the most common. Amoeba establishes hepatic infection through the portal venous system. A past history of dysentery or present history of diarrhea is rarely available. A typical patient will have fever and leukocytosis without eosinophilia. The alkaline phosphatase level is elevated in 80% of the patients, along with moderate elevation of transaminases. In a typical patient, the abscess is located in the right lobe of the liver. In our patient the abscess was located in the left lobe. Multiple abscesses, although rare, can be seen. Needle aspiration is to be performed only if there is no response to antibiotic therapy after 3-5 days, or the abscess appears to be imminent risk of rupture. Aspiration of the abscess under ultrasound or CT guidance also can be performed to establish a diagnosis. Typical aspirate has the appearance of “anchovy paste,” chocolate-colored fluid, due to necrotic hepatocytes. Serologies are positive in 92%–97% of cases at the time of presentation. Of note, up to 25% of the population in endemic areas will have positive serologies in the absence of infection.