A Young Man from Peru with Fever and Abdominal Pain
(See pages 879–80 for Answer to Photo Quiz)

Figure 1. Abdominal CT scan showing a large, irregular, crescent-shaped, calcified density in the proximal portion of the duodenum and a calcification in the wall of the gallbladder.

A healthy, 28-year-old Peruvian man presented to the emergency department with a 1-day history of fever and chills and a 2-month history of anorexia and nausea, weight loss of 4.5 kg, and progressively worsening pain in the right upper quadrant and epigastric region that radiated to his right flank. His abdominal pain was exacerbated by eating and was partially relieved with the use of antacids and proton pump inhibitors. The patient denied having cough, vomiting, diarrhea, constipation, rashes, pruritis, jaundice, or other systemic symptoms. The findings of physical examination were remarkable for a temperature of 38.1°C, jaundice, and mild tenderness in the right upper quadrant, without guarding or rebound. Murphy’s sign was absent, and there was no palpable hepatosplenomegaly.

Laboratory data was significant for a leukocyte count of 4600 leukocytes/mm³, with a normal differential count. The hemoglobin level and hematocrit were in the reference range. Serum enzyme levels (and reference ranges) were as follows: alanine aminotransferase, 740 IU/L (0–40 IU/L); aspartate aminotransferase, 361 IU/L (0–37 IU/L); alkaline phosphatase, 218 IU/L (34–126 IU/L); total bilirubin, 4.4 mg/dL (0–1.0 mg/dL);

Figure 2. Histologic section of the gallbladder (hematoxylin-eosin stain; original magnification, ×100).
Figure 3. A worm (length, 19 mm) that exited the common bile duct after endoscopic retrograde cholangiopancreatography was performed.

and direct bilirubin, 3.3 mg/dL (0–0.3 mg/dL). Findings of the serum chemical analysis were normal, and serum levels of protein and albumin were in the reference range. Ultrasonography of the abdomen showed only nonspecific thickening of the gallbladder wall. CT of the abdomen revealed calcifications within the gallbladder wall, multiple calcifications within a mildly enlarged common bile duct, and a large, irregular, crescent-shaped, calcified density in the proximal portion of the duodenum (figure 1).

The patient was admitted for choledocholithiasis and was treated with intravenous piperacillin/tazobactam for early-stage cholangitis. Endoscopic retrograde cholangiopancreatography (ERCP) with biliary sphincterotomy was performed, and several stones were removed from the common bile duct. Levels of transaminases, alkaline phosphatase, and bilirubin were persistently elevated. The patient underwent laparoscopic cholecystectomy with intraoperative cholangiography that demonstrated a dilated common bile duct with filling defects. A histologic section of the patient’s gallbladder is shown in figure 2. ERCP was repeated, and a worm exited the common bile duct after the injection of contrast medium (figure 3).

What is your diagnosis?