A 41-Year-Old Hispanic Man with Nonproductive Cough

(See pages 1794–5 for the Answer to the Photo Quiz)

A 41-year-old Hispanic man with a history of type 2 diabetes presented to our medical service with nonproductive cough, chills, chest pain, and shortness of breath. He denied exposure to sick contacts, exposure to tuberculosis, and previous episodes of pneumonia. He was originally from southern Mexico and had moved to the United States 5 years before presentation. He worked at a restaurant and had smoked 1 pack of cigarettes per day for the previous 10 years.

On examination, he was febrile (temperature, 38.2°C) and tachypneic, and he had decreased breath sounds on the left hemithorax. A chest radiograph revealed left pneumothorax with extensive bilateral parenchymal opacities, and a chest tube was placed. Computed tomography of the chest (figure 1) revealed a moderate-sized left pneumothorax, small left pleural effusion, some calcified hilar lymph nodes, and scattered pulmonary nodules with cavitations.

The patient’s peripheral white blood cell count was 11,700 cells/µL, and his glycosylated hemoglobin level was 10%. Thoracentesis revealed an exudate. Bacterial cultures and mycobacterial stains from pleural fluid samples had negative results. Bronchoscopy was performed; bacterial, mycobacterial, and...
fungal stains and cultures had negative results. Video-assisted thoracotomy with lung biopsy was eventually performed. The biopsy showed organisms (figure 2); cultures performed on the biopsy and pleural fluid samples confirmed the diagnosis (figure 3).

What is your diagnosis?