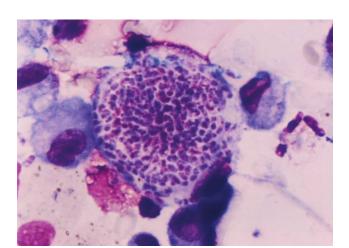
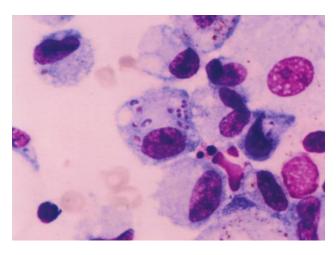
## A Patient with HIV Infection, Cough, Asthenia, and Fever (See pages 662-3 for the Answer to the Photo Quiz)



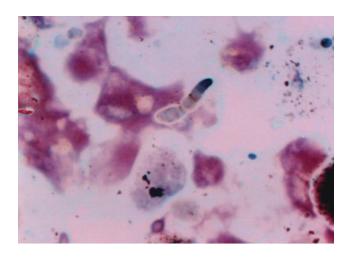
**Figure 1.** Intracellular microorganisms in bronchoalveolar lavage fluid (Giemsa stain; original magnification,  $\times 200$ ).

A 41-year-old HIV-positive woman living in the Democratic Republic of Congo was referred to our institution because of a worsening clinical condition despite several courses of antibiotics. She presented with asthenia, anorexia, fever, cough with expectoration of yellowish sputum, dyspnea, dysphagia, and



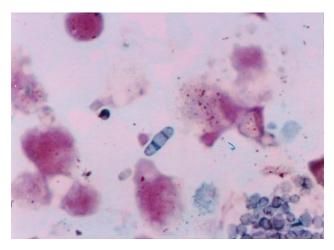
**Figure 2.** Intracellular microorganisms in bronchoalveolar lavage fluid (Giemsa stain; original magnification, ×200).

abdominal pain and tenderness of 3-months duration. She had a history of a 1-month stay in China ~1 year before presentation. A physical examination revealed hypoventilation of lung bases, hepatosplenomegaly, and fever. Elevated hepatic enzymes were seen on blood examination. CT of the chest and abdomen



**Figure 3.** Gomori methenamine silver staining of bronchoalveolar lavage fluid showing septate cells (original magnification, ×400).

showed enlarged mediastinal and mesenteric lymph nodes. Cultures of blood and bronchoalveolar lavage fluid were performed. Direct examination of bronchoalveolar lavage fluid with Giemsa staining showed intracellular microorganisms (figures 1 and 2). Methanamine silver staining of the bronchoal-



**Figure 4.** Gomori methenamine silver staining of bronchoalveolar lavage fluid showing septate cells (original magnification, ×400).

veolar lavage fluid (figures 3 and 4) showed septate yeast-like cells. Cultures of blood and bronchoalveolar lavage fluid were positive for a filamentous fungus.

What is your diagnosis?