

CLINICAL IMAGES

Acute pulmonary histoplasmosis

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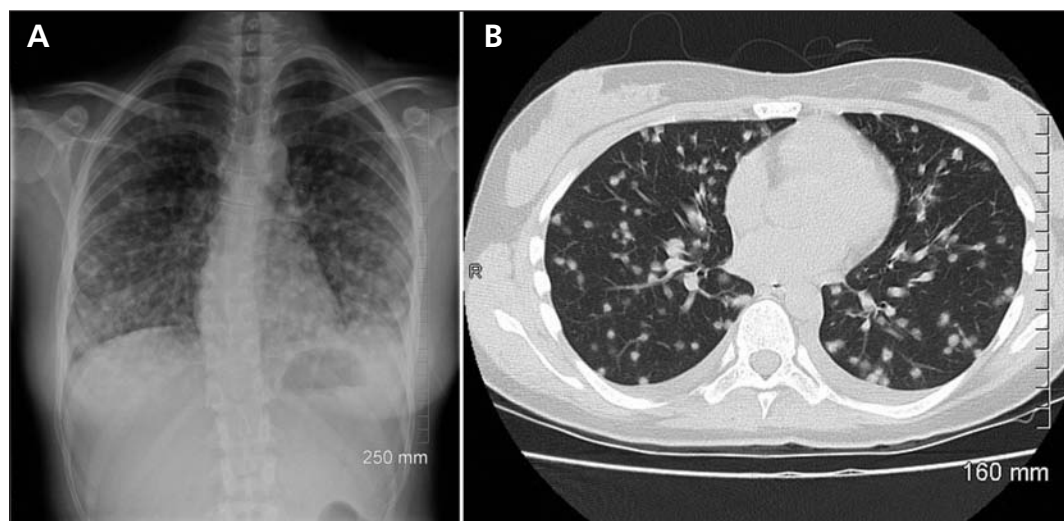


Figure 1: (A) Chest radiograph and (B) computed tomographic scan of a 21-year-old woman with a three-week history of shortness of breath and dry cough following a crop-planting trip to El Salvador. Both images show symmetrically distributed nodules consistent with acute histoplasmosis.

A 21-year-old previously healthy woman presented with a three-week history of shortness of breath and dry cough. She had recently returned from a humanitarian trip planting crops in El Salvador. Five coworkers had experienced similar symptoms and had sought care elsewhere.

On examination, the patient was afebrile and in no distress, with an oxygen saturation level of 96% on room air. Radiography of the chest and computed tomography of the lungs showed symmetrically distributed nodules bilaterally (Figure 1). The following day, bronchoscopy with lavage was performed, and a subsequent diagnosis of acute histoplasmosis was confirmed based on immunodiffusion testing and fungal culture. The patient's condition improved over a five-day period, and she was discharged with no medications. A follow-up chest radiograph six months later was normal.

Histoplasmosis is a fungal infection endemic to El Salvador, and it is also highly prevalent in the Ohio and Mississippi valleys.¹ *Histoplasma capsulatum* survives for many years in soil nourished by bird or bat droppings. Infection may occur when there is exposure to spores released from disturbed contaminated soil.

Acute pulmonary histoplasmosis tends to be a self-limited disease. It is most commonly asymptomatic, but even instances of symptomatic disease usually do not require treatment.¹⁻³ Symptoms may include fever, headache, weakness, chest pain and dry cough. When imaging is done, chest radiographs may show patchy pneumonia involving one or more lobes with adenopathy of the mediastinum or hilum. As in this patient, inhalation of a large inoculum of *H. capsulatum* can occasionally lead to striking reticulonodular infiltrates with nodules. Calcification leading to a "buckshot" appearance may occur as the pneumonia clears. Histoplasmosis may cause chronic cavitary disease in patients with emphysema or disseminated disease in immunocompromised patients; in these instances, treatment is recommended if infection occurs.¹⁻³

References

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