

Case History

A 33 year old physician was found to be tuberculin skin test (TST) positive in August of 2005. He had been TST negative 12 months previously, receiving only one-step testing. His chest radiograph showed no signs of disease. He had no pulmonary or constitutional symptoms, and was started on isoniazid and pyridoxine for treatment of latent tuberculosis in early November 2005. On December 9, he developed hemoptysis. Over the course of the day, he produced approximately 3 teaspoons of bright red blood. Until that day, he had had no cough. He had no chest pain, palpitations, fevers, chills or weight loss. He also denied abdominal pain, nausea, vomiting, diarrhea, constipation, headaches, mental status changes or weakness.

Past Medical History:

- ❖ No chronic conditions, surgeries or hospital admissions.

Medications:

- ❖ Isoniazid 300 mg daily
- ❖ Pyridoxine 100 mg daily

Family History:

- ❖ Mother is alive and healthy, age 58
- ❖ Father is alive and healthy, age 60.

Social History:

- ❖ Pt is a second year house officer in an urban hospital.
- ❖ No tobacco use
- ❖ Social drinker until 1 month ago when beginning isoniazid.
- ❖ No illicit, including intravenous, drug use
- ❖ Two years previously, pt spent three months in Thailand. He took malaria prophylaxis and traveled predominantly in urban areas. He did not swim in fresh water lakes, he did not have contact with wild animals or livestock. He did not do any health care work. His diet included fresh vegetables, meat and seafood, including shellfish, some of which was raw. He was well for the entirety of the trip.

Physical Exam

General: Well nourished, young man in no distress.
Vital signs: Temp 99.0 °F, heart rate 64/minute, respiratory rate 15/minute, blood pressure 117/75 mmHg, Pulse oximetry 99% on room air.
HEENT: Conjunctiva without injection or exudates. Pupils were equal, round, and reactive to light bilaterally.

Neck: Supple without lymphadenopathy, thyromegaly, carotid bruits or jugular venous distention.
Heart: Regular rhythm with rate in the 60s, constant S1 and physiologically split S2. Point of maximal intensity was nondisplaced. No murmurs, rubs or heave.
Lungs: Clear to auscultation bilaterally with no wheezes.
Abdomen: Normal bowel sounds, no scars, bruits, masses or organomegaly. No tenderness to palpation.
Extremities: No peripheral lymphadenopathy, cyanosis, clubbing, edema.
Dermatologic: No skin lesions or rashes.
Neurologic: Oriented and appropriate. Cranial nerves intact. Full strength and sensation of all extremities. No cerebellar deficits.

Laboratory and Radiology Studies

- ❖ Sodium 139 mEq/L, potassium 4.1 mEq/L, chloride 104 mEq/L, bicarbonate 29 mEq/L, blood urea nitrogen 10 mg/dL, creatinine 0.8 mg/dL, glucose 88 mg/dL, calcium 9.1 mg/dL
- ❖ WBC $6.7 \times 10^9/L$ with 4% eosinophils, hemoglobin 13.5 g/dL, platelets $270 \times 10^9/L$
- ❖ PT 9.7 seconds, aPTT 43 seconds
- ❖ Chest radiograph demonstrated normal cardiac silhouette with a left lower lobe alveolar lesion.
- ❖ Chest CT revealed normal lung parenchyma except for a 4 cm left lower lobe alveolar infiltrate with a central cyst and a more lateral left lower lobe alveolar infiltrate.

Clinical Course

The patient was relieved of clinical duties and sent home for respiratory isolation. Sputum samples were collected for the next three mornings—all of which had negative smears for acid fast bacilli. He continued to be asymptomatic except for the hemoptysis.

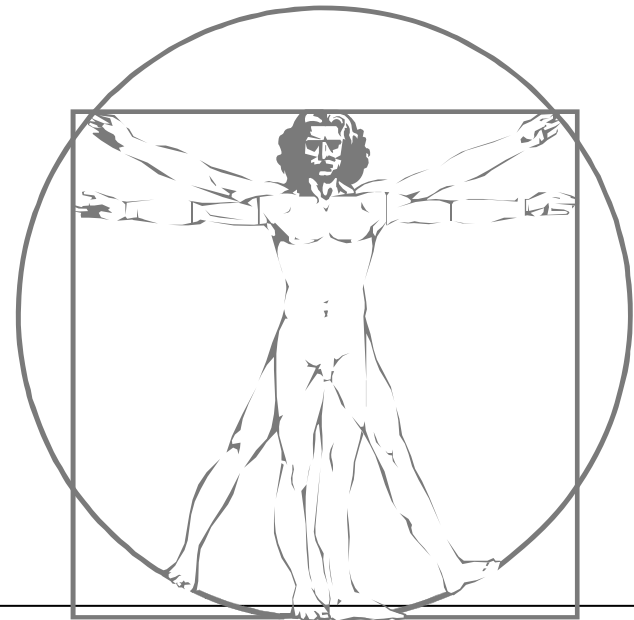
A diagnostic test was performed.

Protocol prepared by Katharine Bar, MD

**Department of Internal Medicine
Clinicopathologic Conference**

May 11, 2006

A 33 year old Man with Hemoptysis



Discussant: Gonzalo M. L. Bearman, MD, MPH
Assistant Professor of Internal Medicine

Radiologist: Mark S. Parker, MD
Associate Professor of Radiology

Diagnosis

Discussant: Richard P Wenzel, MD, MSc
William Branch Porter Professor and Chair,
Department of Internal Medicine