Tuberculosis Case Discussions

for the Tuberculosis Workshop

National Conference on Migrant and Seasonal Farmworkers

Denver, Colorado, May 8

Prepared by Stephen Ciesielski, PhD, MD
Department of Family Medicine
Valley Medical Center
Fresno, California
3/31/93

SHORT TEACHING POINTS

SHORT CASE NUMBER 1

A 40 year old Hispanic HIV negative male farmworker with a one month history of cough and weight loss is found to have AFB on smear and is begun on standard therapy for active tuberculosis. His culture is found to be positive for *M. tuberculosis*.

QUESTIONS:

1. Are you concerned about drug resistance?

SHORT CASE NUMBER 2

A forty year old male Haitian farmworker is found to be PPD and control positive. He is asymptomatic, chest radiograph is within normal limits, and no AFB are observed on smear. Culture for *Mycobacteria* is pending.

QUESTIONS

1. What further workup, if any, is indicated for this patient?

2. What treatment, if any, is indicated?

PLEASE FINISH DISCUSSING QUESTIONS #1 AND #2 BEFORE READING FURTHER.

CONTINUATION OF CASE NUMBER 2

The patient's HIV test is unreactive and his liver function tests are within normal limits. He is begun on prophylactic therapy. He returns to the clinic 1 month later for treatment of a wrist sprain received while playing dominoes. He reports through the interpreter at this time that he has discontinued his therapy.

QUESTIONS

1. What would be the appropriate course of action in this situation?

SHORT CASE NUMBER 3

A fifty year old African American male farmworker presents to your clinic with a two month history of weight loss, fevers, night sweats, productive cough, and recent onset of hemoptysis, and is found to have active tuberculosis. As is your practice routinely, you ask why he delayed seeking medical care for so long. He responds that his labor camp is 30 miles from your clinic, and that his labor contractor had put him off on the several occasions he had asked. Showing his boss the bloody sputum in his handkerchief had convinced him to bring him this time.

On testing of the crew, 14/25 individuals are PPD positive, 4/25 are anergic, and 7/25 are PPD negative. Clinic and county health department records show that 6 of the 14 PPD positive individuals were PPD negative 1-2 years previously.

QUESTIONS

1. Are there any non-medical interventions appropriate in this situation?

SHORT CASE NUMBER 4

A 33 year old male Hmong farmworker who arrived in the US two years ago presents to your clinic. He has a history of intestinal parasitosis which was treated on entry, and a positive HB_sAb serology. His PPD was negative with positive controls on entry. He has been in good health since his arrival. He reports contact with an individual who he believes has tuberculosis and requests a tuberculosis test. He is completely asymptomatic.

PPD (left volar forearm) and controls (right volar forearm [mumps and candida]) are placed. He returns two days later, and the PPD is read as completely unreactive, and the controls as positive. He is assured that he has not been exposed.

Six days later the patient returns again. He complains of swelling and pruritus on his left forearm. On examination, there is a one centimeter induration with a two centimeter erythematous base on his left mid forearm. The nurse who placed the PPD is unable to recall if the swelling is in exactly the same place as the PPD. He has no other complaints.

However, he wants to know what is causing the swelling and pruritus on his arm.

QUESTIONS:

1. What is causing the swelling and pruritus on his arm?

2. Is the positive HB_sAb of any significance in this case?

LONG CASE NUMBER 1

A 35 year old Mexican female receives a routine physical examination in your clinic. She is asymptomatic and has no complaints. The characteristic 3 X 10 mm crescentic BCG scar is noted in the left gleno-humeral area. She receives a PPD test by Mantoux method on her left volar forearm and a Mumps and Candida control on her right volar forearm. On her return 2 days later, the controls are positive at 5 x 5 mm and 5 x 8 mm respectively, and her PPD reaction measures 12 x 10. She has been doing farmwork for 5 years in the USA, and is originally from Sonora. She denies any known exposure to tuberculosis in the USA or Mexico.

QUESTIONS:

1. What additional workup, if any, is indicated for this patient?

2. Is treatment indicated for this patient? With what?

LONG CASE NUMBER 2

A 40 year old African-American male farmworker with insulin dependent diabetes presents to your clinic with a 2 month history of weight loss, occasional fever, and increasing productive cough. The patient is somewhat cachectic, dishevelled, and a faint odor of alcohol is notable. He reports drinking "some," but responses to CAGE questions are indefinite. He has no other significant medical history. PPD and controls are positive, and chest x-ray shows a right pleural effusion and hilar adenopathy. Three sputum samples are obtained and sent for culture and microscopic examination.

QUESTIONS:

1. What further work up, if any, is indicated for this patient?

2. Would you treat this patient now? With what?

3. What public health measures would you consider?

4. If treatment is initiated, what consideration are there for followup?

LONG CASE NUMBER 3

A 29 year old female Guatemalan was screened for possible infection with tuberculosis after a case was identified in her labor camp. The PPD reaction measures 4 x 4 mm, and the Mumps and Candida controls 0 x 0 and 4 x 4 respectively. However, 2 weeks later she returns to the clinic and reports that a university researcher who was conducting a study of tuberculosis among farmworkers had given her another set of PPD and controls two days ago, although she told him she had just been tested. When you examine her PPD test, you find it measures 10 x 10 mm.

QUESTIONS

1. What is the interpretation of this PPD test?

2. What further workup, if any, is indicated for this patient?

LONG CASE NUMBER 4

A 33 year old male African American farmworker presents to your clinic complaining of weight loss and night sweats. He denies any cough. He has a twenty pack year history of smoking and does not drink alcohol. He has no other significant medical history and is taking no medications. Physical exam demonstrates only mild cachexia and diminished breath sounds. He is found to be completely unreactive to 5 tuberculin units of PPD and 15 nitrogen units of Mumps and Candida antigen administered by the Mantoux method.

QUESTIONS

1. What further workup, if any, is indicated for this patient?

PLEASE FINISH DISCUSSING QUESTION #1 BEFORE READING FURTHER.

CONTINUATION OF CASE NUMBER 4

The HIV test is negative, the chest radiograph is within normal limits, no AFB are observed on smear, and the PPD and controls are again negative. His hematocrit and hemoglobin are 37/12, and WBC of 4.1 x 10^3/ml with lympocytes 0.9 x $10^{3/ml}$. Electrolytes are within normal limits.

QUESTIONS

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