

# Tuberculosis in Farmworkers

Allison Nist, MD, included the following clinical points in her talk "Combating Tuberculosis in Farmworkers" at the 1996 Farmworker Health Conference.

Several studies have documented the background prevalence of TB infection in farmworkers to be 40-70 percent, with sero-prevalence of HIV as high as 4-5 percent in some groups. With half of all farmworkers infected with TB and one in 20 to 25 infected with HIV, we can expect that the HIV epidemic will increasingly fuel the TB epidemic in farmworkers in the years to come, as it increases the likelihood that dormant TB infection will progress to active TB disease.

Extrapulmonary TB, with or without concomitant pulmonary disease, may become the "emerging mycobacterial disease" of this decade, since this presentation may occur in up to half of all patients with HIV/TB coinfection who develop active TB disease.

The most common presentations of extrapulmonary TB in HIV-infected persons are: miliary (disseminated) TB, pleural TB, and TB lymphadenitis. These may frequently be overlooked in HIV-infected persons referred for evaluation for INH preventive therapy unless the physician does a careful physical exam and views all chest radiographs (not just reports). Subtle hilar adenopathy and pleural effusions are frequently missed signs of active TB disease.

One recent case in Collier County last year involved a 42-year-old Haitian male, HIV-positive, referred for INH preventive therapy. PPD was 5 mm and CXR was read as lung fields clear without significant abnormalities. PE was pertinent only for adenopathy. He was placed on INH self-administered preventive therapy.

One month later he presented to a hospital emergency room, near stridorous from massive cervical adenopathy (see photo). Supraclavicular node biopsy revealed profuse AFB, DNA probe positive for *M.tb*, sensitive to all

drugs, negative for *Mycobacterium avium intracellulare*. The CXR that initially had been read as LFC, on review had significant right hilar adenopathy. The patient responded well to standard



TB cervical adenitis (scrofula) is a frequent extrapulmonary manifestation of TB in HIV-positive patients. Photo courtesy Allison Nist, MD.

short-course TB chemotherapy. As is not uncommon, however, he did develop a significant suppurative inflammatory response in the nodes, with warmth and fluctuance. Rather than perform an I&D (which could have lead to highly infectious draining tracts which have great difficulty healing), we treated this patient three times during his therapy with pulse steroids. Each time the fluctuance and suppuration responded. Overall, the patient was treated with seven months of standard therapy. At case close-out, he had minimal residual adenopathy and CXR had returned to LFC.

Clinicians frequently assume that persons with MDR-TB will be disabled and easy to identify. They may be fooled.

We recently worked with a farmworker who had been treated with self-administered INH and Rifampin for three years from 1990-1993, never converting his sputum. Finally in 1990 it was discovered that he had developed TB resistant to both INH and Rifampin. He signed out against medical advice and

was lost to follow-up until 1994. During this time, he traveled and worked as a migrant farmworker throughout the eastern stream (Florida through Delaware). He also attended clinics where he received insulin for his diabetes.

He was not identified as having TB until 1994, at which time CXR showed extensive destruction of his left lung and 4+ AFB smear MDR-TB. Treatment was successfully completed through one year of intensive treatment in our State of Florida TB Hospital (A.G. Holley Hospital in Lantana, Florida) and one year of outpatient treatment with PZA, ethambutol, ofloxacin, and clofazimine.

A PPD-positive farmworker with cavitory lung disease does not automatically have TB. Clinicians in migrant health centers need to remember that cavitory lung disease has an extensive differential diagnosis, including aerobic/anaerobic abscess, aspergillosis, histoplasmosis, coccidioidomycosis, blastomycosis, cryptococcosis, septic embolus, nocardiosis, atypical TB, actinomycosis, salmonellosis, amoebic abscess, staphylococcal or other colonization of emphysematous bullae, neoplasm, autoimmune disease (Wegener's granulomatosis or others), and, rarely, PCP.

Always take a complete family history and personal history for risk factors for exposure to TB. One middle-class gay male PWA with no apparent risk factors for exposure to TB, after developing pulmonary TB, was found on questioning to have had a father who died of active TB. PPD skin tests and even anergy panels may be misleading (false negative). A complete history may disclose risk factors that may be indications for INH prophylaxis in an HIV-infected person even when the PPD is read as 0 mm of induration. ■

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