SAN FRANCISCO GENERAL HOSPITAL
EMERGENCY DEPARTMENT

DATE ADOPTED: 3/1/07

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PROTOCOL TITLE:

TUBERCULOSIS ADMISSION CRITERIA FOR PATIENTS IN CUSTODY

Purpose: This policy outlines the evaluation for tuberculosis in the ED and provides the admission criteria for San Francisco Jail inmates and patients in custody.

Background: The jail is an ideal setting for TB transmission because of its congregate nature and high-risk population. Ruling out active TB is a high priority, and each inmate receives a symptom review for TB before being accepted into the jail. A TB skin test (TST) is placed if the inmate is housed in the jail, and a chest x-ray is obtained for inmates with a positive TST. Inmates with symptoms consistent with TB on jail intake or who have an abnormal CXR are referred to SFGH ED for immediate evaluation. In general, a more conservative approach of erring towards admission and sputum collection is taken because of the transmission risk to other inmates and the difficulty of comprehensive contact investigation in the jail setting. A symptom review, TB risk factor assessment (population and medical), chest x-ray and physical exam are required for all inmates being evaluated in the ER. Any patient with a known cavitary infiltrate or active cough should be masked and placed in isolation during evaluation.

Radiographic findings typical of TB include:

- Cavitary infiltrates
- Non-calcified nodules >1 cm in diameter
- Diffuse bilateral military pattern
- Upper lobe infiltrates
- Hilar or mediastinal adenopathy
- Unilateral pleural effusion
- Substantial infiltrates (any lobe) with minimal clinical symptoms of disease.

Radiographic finding of pulmonary TB in HIV:

- Radiographic presentation is less typical as the CD4 counts decline (as described above). Cavitary lesions are less common with lower CD4 counts, while multi-lobar infiltrates, lower lobe infiltrates and intra-thoracic adenopathy are more common
- Non-calcified nodules 5mm or greater may be a presentation of TB
- HIV-infected patients with active pulmonary TB often have normal CXRs (up to 10% in the literature) and TB symptoms should be the basis of an inpatient work-up with sputum cultures and possible TB treatment

Hospitalization will occur in the following cases:

1. Patients with a positive PPD in jail and CXR parenchymal changes or unilateral pleural effusion (unless TB previously documented as treated and CXR changes documented stable for at least 6 months), *or*

2. Patients with cough for >2 weeks (if COPD, then any change in cough) or ≥2 constitutional symptoms (fever, sweats, weight loss), and an abnormal CXR (regardless of CXR chronicity), *or*

3. HIV+ and any of the following: cough for >2 weeks, or ≥2 constitutional symptoms (fever, sweats, weight loss), or CXR parenchymal changes or unilateral infilitrate not known to be stable for at least 6 months, *or*

4. Any patient in whom the ED deems sputum samples for AFB are needed

Dr. Joe Goldenson (pager 764-0775) or Dr. Masae Kawamura (cell: 218-4211) must be consulted for any exceptions to the above before the patients are returned to the jail.