City and County of San Francisco | Department of Public Health | Population Health Division

Edwin M. Lee
Mayor

Tuberculosis Control Unit | Julie Higashi, MD, PhD – Director | Disease Prevention and Control Branch

Nursing/Pharmacy Monitoring of LTBI Treatment in the Community-Oriented Primary Care Clinics

This guideline applies to persons who are started on treatment for latent tuberculosis (TB) infection in their primary care clinic.

The San Francisco TB Control Unit recommends that patients placed on treatment for TB infection receive routine monitoring to promote completion of treatment and minimize toxicity from the anti-TB medications.

Through the above testing, Santa Clara County Public Health Department case manages the following patients with LTBI who are at high risk for progression to active tuberculosis (TB) disease:

Clinicians in the COPCs will diagnose and treat uncomplicated TB infection. Monitoring and adherence of treatment will be supported by clinicians, nurses, pharmacists, and other COPC staff.

LTBI: Having a positive reaction to the TST and/or a positive IGRA and no clinical, bacteriological or radiographic evidence of active tuberculosis.

Conversion:
TST conversion is defined as an increase of at least 10 mm of induration from <10mm to >10mm within two years which is indicative of recent infection with Mycobacterium tuberculosis complex.
Example: a TST of 4 mm that increases in size to 14 mm or more of induration within 2 years would be an example of TST conversion.

IGRA test conversion is defined as a previous negative IGRA within two years.

Procedure

A. COPC provider initiates treatment for TB infection (LTBI).
1. Notification to COPC staff for monitoring and adherence of LTBI treatment.
2. Prescription for anti-TB medication should have monthly refills.

B. The COPC staff will manage the patient per the following protocol:
1. make a face-to-face contact for the initial assessment, provide education about LTBI, and review the treatment regimen with the patient.
2. perform monthly assessments (face to face monthly or every other month, if not face to face, telephone call or email) for symptoms of active TB, medication side effects, correct medication dosage, and need for directly observed preventive therapy (DOPT). See LTBI Treatment Checklist. It is recommended that the first month assessment should be done

San Francisco General Hospital • Ward 94
1001 Potrero Avenue, San Francisco, CA 94110
Phone: (415) 206-8524 • Fax: (415) 206-4565 • Web: www.sftbc.org

face to face.

3. Ensure that monthly liver function tests are done on patients who have had laboratory monitoring ordered by their providers. The patient's provider should be notified immediately and LTBI treatment discontinued if AST/ALT values are:
   a. greater than 5 times the normal value OR
   b. greater than three time the normal value with clinical evidence of hepatitis (anorexia, nausea, vomiting, pain in the upper right quadrant, tender palpable liver, jaundice)
4. perform pill counts assessment, consult with medical provider if problems are identified: e.g. TB symptoms, medication side effects, incorrect dose of medication, or non-adherence issues that do not resolve with nursing interventions.
5. document refills, assessment of TB symptoms, medication side effects, and pill counts on LTBI Treatment Checklist. If problems are identified, nursing assessments and interventions must be documented in the medical chart.
6. At the completion of therapy, the COPC staff will document on the LTBI Treatment Checklist that treatment is complete and document in the medical record that LTBI treatment is complete. Give the patient a LTBI Treatment Completion Letter.

C. Adherence

1. COPC staff will confirms the patient's adherence to the medication regimen by tracking med refills AND monthly monitoring.
2. Once COPC staff have confirmed non-adherence, they will contact the patient within five working days to assess and address barriers for LTBI treatment. Nonadherence would include;
   a. Patient does not show up for monthly monitoring
   b. Patient does not refill medications
   c. Patient does not initiate treatment
   d. Patient's refills/monthly monitoring will not result in treatment completion within the following time limits:
      i. Rifampin 600 mg po qd four months within six months, or six months within nine months
      ii. Isoniazid 300 mg po qd six months within nine months, or nine months within one year
3. Need for DOPT and referral to TB clinic/Ward 94 is defined by:
   a. Patient with risk factor for progression AND meets criteria for nonadherence
   b. Patient with immune suppression and risk of nonadherence, e.g. polysubstance use, methadone maintenance, homeless/marginally housed
4. Referral to TB clinic for non adherence may be done by completing the interagency TB47 referral form

Updated October 1, 2013