Recommendations for Latent TB Infection Screening and Treatment during Pregnancy

The Centers for Disease Control and Prevention (CDC) and the National TB Controllers Association (NTCA) recommend that all pregnant persons with risk factors for active TB should undergo screening for TB infection[1]. Babies born to persons with active TB may have lower birth weight and are at potential risk for congenital TB with associated high mortality. Additionally, infectiousness at delivery could expose both health care providers and the newborn.

TB testing with a tuberculin skin test (TST) in US-born or interferon-gamma release assay (IGRA) in non-US born is indicated in pregnant persons with the following risk factors:

- Non-US-born from a country with high TB endemicity
- HIV or immunocompromised status
- History of contact with a person with infectious TB disease during lifetime

See the California Department of Public Health TB Risk Assessment for details.

Positive TST or IGRA

Pregnant person with a positive TB test result should receive a medical evaluation, including a chest radiograph (CXR) with a lead shield. The CXR may be deferred until after the first trimester. The CXR should be done as soon as possible if the following are present:

- HIV or other immunosuppression
- History of recent contact with a person with infectious TB disease
- Documented TB infection test conversion in the past 2 years

In general, if person has had a normal CXR in the 3 months prior to medical evaluation and is asymptomatic, a repeat CXR is not necessary.

If the CXR has abnormalities suggestive of active TB disease per radiology report, refer to SFDPH TB Clinic as soon as possible. Contact us at 628 206-8524.

Treatment

If the CXR is normal, the decision of whether to treat latent TB infection (LTBI) during pregnancy should be made on a case-by-case basis. Prenatal visits represent a unique opportunity for treatment of latent TB, as maternal health care benefits may be lost within a few weeks/months after delivery and many persons may only access medical care when pregnant. If treatment is deferred, a referral should be made to the primary care provider to treat the LTBI.

Recommendations to delay LTBI treatment during pregnancy have largely been based on increased risk of hepatotoxicity with isoniazid. 3HP has not been studied and should not be offered. Increase in risk has not been documented with rifampin-only based regimens.

Per NTCA guidance, SFDPH recommends persons with uncomplicated pregnancy can be treated for LTBI starting after the first trimester with rifampin 600 mg po daily x 4 months[1].

- If the person has risk factors (e.g., HIV or other immunosuppression, history of recent contact with a person with infectious TB diseases or is a documented convertor in the past 2 years), strongly encourage LTBI treatment as soon as possible.
- Educate on monitoring for liver toxicity (anorexia, new nausea, vomiting, abdominal pain, jaundice etc).
- Counsel on the presence of nitrosamines in rifampin. In general, per the FDA, nitrosamine impurities have been shown to be potential carcinogens in animal studies with high nitrosamine exposure over prolonged periods of time (e.g., the equivalent of years-decades). The benefits of treatment with short-course rifampin for latent TB far outweigh any potential risk from nitrosamine exposure[2].
- Once rifampin is started, obtain baseline and monthly liver function tests.
- If rifampin is contraindicated, considering deferring treatment until 3-6 months post-partum given risk for transaminitis with isoniazid and because there is little safety data on rifabutin.
- If LTBI treatment extends into the post-partum period, remind patient that rifampin is safe to take while breast-feeding for both infant and mother.

References

1. Guidelines for the Treatment of Latent Tuberculosis Infection: Recommendations from the National Tuberculosis Controllers Association and CDC, 2022. Available at URL: https://www.tbcontrollers.org/resources/tb-infection/clinical-recommendations/
2. FDA Updates and Press Announcements on Nitrosamines in Rifampin and Rifapentine. Available at URL:

https://www.fda.gov/drugs/drug-safety-and-availability/fda-updates-and-press-announcements-nitrosamines-rifampin-and-rifapentine. Updated Jan 28, 2021.

Last updated 4/25/23