Prenatal Syphilis Screening, Staging, Treatment, and Monitoring for Congenital Syphilis Prevention

Screen

Screen all patients at first prenatal visit, regardless of risk

Non-treponemal test such as RPR or VDRL, with reflex confirmatory treponemal test such as TP-PA

Stage

SYPHILIS DIAGNOSIS AT INITIAL PRENATAL SCREENING

Primary + *Chancre*	**Late-Latent or Unknown Duration** *NO symptoms, and infection does not meet criteria for early latent*[2]	**Neurosyphilis**[3] *+ CNS sign or symptoms* *+ CSF findings on lumbar puncture (LP)*	**Rescreen all patients at 28-32 weeks gestational age (regardless of risk).**
Secondary *+ Rash and/or other signs*[1]			**Also rescreen at delivery if patient at risk:**
Early-Latent *NO symptoms and infection occurred within one year*[2]			• Missed 28-32 week rescreen • Lives in high morbidity area • HIV-positive • Other STD diagnosed within the past 12 months • Illicit substance use • Reports sex exchange • Homeless/ Unstable housing • History of incarceration within the past 12 months • Multiple sex partners, or partner with other partners

Treat

Benzathine penicillin G 2.4 Million Units, Intramuscularly (IM) Once	**Benzathine penicillin G** 2.4 Million Units IM every 7 days, for 3 doses (7.2 mu total) *If any doses are late or missed, restart the entire 3-dose series. A 6-8 day interval may be acceptable. Consult your local STD controller.*	**Aqueous penicillin G** 3-4 Million Units Intravenously every 4 hours for 10-14 days

Monitor

Repeat follow-up titers at 28-32 weeks. Consider monthly titers until delivery if at high risk for reinfection.

Post-treatment serologic response during pregnancy varies widely. Many women do not experience a fourfold decline by delivery. If fourfold increase occurs after treatment completion, evaluate for reinfection and neurosyphilis.

1. Signs of secondary syphilis also include condyloma lata, alopecia, and mucous patches.
2. Persons can receive a diagnosis of early latent if, during the prior 12 months, they had a) seroconversion or sustained fourfold titer rise (RPR or VDRL); b) unequivocal symptoms of P&S syphilis, or c) a sex partner with primary, secondary, or early latent syphilis.
3. Neurosyphilis can occur at any stage. Patients should receive a neurologic exam including ophthalmic and otic; LP is recommended if signs/symptoms present.

Important Considerations for Syphilis Treatment in Pregnancy

Screen early, treat as soon as possible
Treatment failure, and subsequent congenital syphilis, has been associated with a later gestational age at time of treatment.

Treatment is safe and highly effective
Prenatal therapy treats both mother and fetus; effectiveness approaches 100%.

Benzathine Penicillin G (or Bicillin-LA) is the ONLY recommended therapy for pregnant women infected with syphilis.

Someone with signs, symptoms, or exposure to syphilis may receive treatment for early disease while serology results are pending.

ADDITIONAL RESOURCES

- **For detailed treatment guidelines,** including complete penicillin desensitization recommendations see the CDC 2015 STD Treatment Guidelines: www.cdc.gov/std/tg2015
- **For clinical questions,** enter your consult online at the STD Clinical Consultation Network: www.stdccn.org

What if my patient is allergic to penicillin?

- **Verify the nature of the allergy.** Approximately 10% of the population reports a penicillin allergy, but less than 1% of the whole population has a true Ig-E mediated allergy.
- **Symptoms of an IgE-mediated (type 1) allergy include:** Hives, angioedema, wheezing and shortness of breath, and anaphylaxis. Reactions typically occur within 1 hour of exposure.
- **Refer for penicillin skin testing** if the nature of the allergy is uncertain or cannot be determined.
- **Refer for oral desensitization with penicillin** if the skin test is positive or the patient has a true penicillin allergy.
- **Desensitization should be performed in a hospital.** Serious allergic reactions can occur. Consult an allergist.
- **Treat the patient with Benzathine penicillin G.** Treatment according to appropriate stage of syphilis (see opposite page for treatment regimen).

MORE INFORMATION ABOUT IgE-MEDIATED PENICILLIN ALLERGY CAN BE FOUND ONLINE: "Is it Really a Penicillin Allergy?" www.cdc.gov/antibiotic-use/community/pdfs/penicillin-factsheet.pdf

Sources

Workowski KA, Bolan G. Sexually Transmitted Diseases Treatment Guidelines, 2015. In: Center for Disease Control and Prevention, ed. MMWR Morbidity and Mortality Weekly Report, 2015; Assessment, U. *Screening for syphilis infection in pregnancy: US Preventive Services Task Force reaffirmation recommendation statement.* Ann Intern Med, 2009. 150: p. 705-709; Alexander JM, Sheffield JS, Sanchez PJ, et al. Efficacy of treatment for syphilis in pregnancy. *Obstetrics & Gynecology* 1999;93(1):5-8; Plotzker RE, Murphy RD, Stoltey, JE. "Congenital Syphilis Prevention: Strategies, Evidence, and Future Directions." *Sexually Transmitted Diseases* (2018); Wendel GO, Jr, Stark BJ, Jamison RB, Melina RD, Sullivan TJ. Penicillin Allergy and Desensitization in Serious Infections During Pregnancy. N Engl J Med 1985;312:1229–32.