Does the Infant have physical manifestations of congenital syphilis (CS)?

Clinical Scenario #1: Proven/Highly Probable CS

Does the infant have a 4-fold (two-dilution) titer higher than the gestational parent's titer?

Clinical Scenario #2: Possible CS

Does the infant have a positive darkfield test or PCR of placenta, cord, lesions, or body fluids or a positive silver stain of the placenta or cord?

Clinical Scenario #3: CS Less Likely

Did the gestational parent: receive adequate treatment (benzathine penicillin G) <30 days before delivery AND show no evidence of reinfection or relapse?

Clinical Scenario #4: CS Unlikely

*West Virginia Law (W. Va. Code Chapter 16, Article 4A) requires prenatal syphilis testing at first prenatal visit. However, additional testing at 28-32 weeks and at delivery is recommended by the CDC for patients with increased risk of syphilis acquisition due to high reinfection rate.
Clinical Scenario #1: Proven/Highly Probable CS

Recommended Evaluation:
- Lumbar Puncture
- CSF analysis for VDRL, cell count, and protein
- Complete blood count (CBC)
  - With differential and platelet count
- Long-bone radiographs
- Other tests as clinically indicated

Recommended Regimens:
- Aqueous crystalline penicillin G
  - 50,000 units/kg of body weight/dose by IV every 12 hours during the first 7 days of life and every 8 hours thereafter for a total of 10 days
- Procaine penicillin G
  - 50,000 units/kg of body weight/dose IM in a single daily dose for 10 days

Clinical Scenario #2: Possible CS

Recommended Evaluation:
- Lumbar Puncture
- CSF analysis for VDRL, cell count, and protein
- CBC
  - With differential and platelet count
- Long-bone radiographs

Any abnormal, incomplete, or uninterpretable results, or is follow-up uncertain?

Yes
- Benzathine penicillin G
  - 50,000 units/kg of body weight/dose IM in a single dose

No
- If follow-up is certain,
  - No treatment, but close serologic follow-up every 2-3 months for 6 months for infants whose gestational parent’s nontreponemal titers decreased at least fourfold after therapy for early syphilis, or remained stable for low-titer, latent syphilis (e.g., VDRL< 1:2 or RPR < 1:4)

Clinical Scenario #3: CS Less Likely

Recommended Evaluation: None

Recommended Regimen: None

Clinical Scenario #4: CS Unlikely

Recommended Evaluation: None

Recommended Regimen: No treatment required
- Any neonate with reactive nontreponemal tests should be followed serologically every 2-3 months for 6 months to ensure the nontreponemal test returns to negative
- If follow-up is uncertain and neonate has a reactive nontreponemal test, Benzathine penicillin G 50,000 units/kg of body weight as a single IM injection may be considered

Flowchart adapted from Texas Department of State Health Services