CONGENITAL SYphilis (CS)
Evaluation and treatment of infants (<30 days old) born to women with syphilis during pregnancy*

Start
ALL INFANTS AND MOTHERS SHOULD HAVE SERUM RPR OR VDRL TITER DRAWN AT DELIVERY

Infant and Mother Criteria

Infant:
- CS findings on physical exam
- Infant titer ≥4 fold higher than mother’s titer
- + darkfield or PCR of lesion/body fluid

Mother:
- Not treated
- Inadequately treated †
- Treatment undocumented
- Treated with a non-benzathine penicillin G regimen
- Received treatment <4 weeks before delivery

No to all

Evaluation

Yes to any

Scenario 1: Proven or Highly Probable CS
- CSF analysis§
  VDRL, cell count, and protein
- Complete blood count (CBC), differential and platelet count
- Long-bone radiographs
- Tests as clinically indicated by signs on physical exam.

Any abnormalities, results not available, OR follow-up II uncertain

Scenario 2: Possible CS
- CSF analysis § VDRL, cell count, and protein
- CBC, differential, and platelet count
- Long-bone radiographs

No abnormalities AND follow-up II certain

No to all

Aqueous crystalline penicillin G ‡
100,000–150,000 units/kg/day, administered as 50,000 units/kg/dose IV every 12 hours during the first 7 days of life and every 8 hours thereafter for a total of 10 days

Benzathine penicillin G
50,000 units/kg/dose IM in a single daily dose for 10 days

Treatment

Yes to both

Scenario 3: Less Likely CS
- Benzathine penicillin G 50,000 units/kg/dose IM in a single daily dose for 10 days

No additional infant evaluation

Review Maternal Titers & Stage:
- ≥4 fold decrease in titer after treatment for early syphilis
- OR
- Stable titer for low-titer, latent syphilis (RPR < 1:4 or VDRL < 1:2)

No to both OR follow-up II uncertain

Yes to either AND follow-up II certain

No treatment indicated with close serologic follow-up of infant every 2–3 months for 6 months

No to both

* Scenario 4 – in which an infant at delivery has a normal physical exam and titer < 4 fold mother’s titer, AND the mother was adequately treated prior to becoming pregnant and sustains RPR titers <1:4 or VDRL<1:2 throughout pregnancy – is not included.
† Benzathine Penicillin G (BPG or Bicillin-LA), administered according to stage of disease and initiated at least 4 weeks prior to delivery is the only adequate treatment for syphilis during pregnancy.
‡ Alternative: Procaine penicillin G 50,000 units/kg/dose IM in a single daily dose for 10 days
§ CSF test results obtained during the neonatal period can be difficult to interpret; normal values differ by gestational age and are higher in preterm infants.
II All neonates with reactive nontreponemal tests should receive careful follow-up examinations and serologic testing (i.e., a nontreponemal test) every 2–3 months until the test becomes nonreactive. Neonates with a negative nontreponemal test at birth whose mothers were seroreactive at delivery should be retested at 3 months to rule out serologically negative incubating congenital syphilis at the time of birth.
*FOR MORE INFORMATION ABOUT SCENARIO 4 MANAGEMENT, TREATMENT OF SYphilIS IN PREGNANCY, NEONATAL CSF INTERPRETATION, AND CS INFANT FOLLOW-UP, PLEASE REFER TO THE 2015 CDC STD TREATMENT GUIDELINES.*