CONGENITAL SYPHILIS (CS)

Evaluation and treatment of infants (<30 days old) exposed to syphilis in utero*

Start → **INFANTS AND BIRTHING PARENT (e.g., mother) SHOULD HAVE SERUM RPR OR VDRL TITER DRAWN AT DELIVERY**

Infant Criteria:

- CS findings on physical exam
- Infant titer ≥4 fold higher than mother's titer
- + darkfield or PCR of placenta, cord lesion, or body fluid
- + silver stain of placenta or cord

No to all →

Maternal Criteria:

- Not treated
- Inadequately treated§
- Treatment undocumented
- Treated with a non-benzathine penicillin G regimen
- Initiated treatment <30 days before delivery

No to all →

Additional Maternal Criteria:

- Adequately treated with benzathine penicillin G appropriate for stage, initiated ≥30 days before delivery

AND

- No concern for reinfection or treatment failure

Yes to any → ***Scenario 1: Proven or Highly Probable CS***

Infant Evaluation:

- **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.**

Infant Treatment:

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

Yes to any → ***Scenario 2: Possible CSǁ***

Infant Evaluation:

- **CSF analysis†**
  VDRL, cell count, and protein
- **CBC, differential, and platelet count**
- **Long-bone radiographs**

Any abnormalities, results not available, *OR follow-up¶ uncertain* →

No abnormalities *AND* follow-up¶ certain →

Infant Treatment:

Benzathine penicillin G

50,000 units/kg/dose IM in a single dose

Yes to both → ***Scenario 3: Less Likely CS***

No additional infant evaluation

Review Maternal Titers & Stage:

- ≥4-fold decrease in titer after treatment for <u>early</u> syphilis

OR

- Stable titer for low-titer, latent syphilis (RPR < 1:4 or VDRL<1:2)

No to both *OR* follow-up¶ uncertain →

Yes to either *AND* follow-up¶ certain →

No treatment indicated

with close serologic follow-up of infant every 2-3 months for 6 months

* 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.

† 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.

‡ Alternative: Procaine penicillin G 50,000 units/kg/dose IM in a single daily dose for 10 days.

§ Benzathine Penicillin G (BPG or Bicillin-LA), administered according to stage of disease and initiated at least 30 days prior to delivery is the only adequate treatment for syphilis during pregnancy.

ǁ Evaluation is not necessary if a 10-day course of parenteral therapy is administered, although such evaluations might be useful. If the neonate's nontreponemal test is nonreactive and the mother's risk for untreated syphilis is low, a single IM dose of BPG can be considered without evaluation.

¶ 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 CDC 2021 STI TREATMENT GUIDELINES.

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