



## **FAQ on COVID management in Newborn**

### **1. What is the recommendation for Antenatal Steroid in COVID positive or suspected mother?**

Ans: In context of imminent preterm delivery, antenatal steroid should be administered to mothers with threatened preterm labor (gestational age 24-34 weeks)

### **2. What are the recommended delivery room practices?**

Ans :

- There should be provision for separate labour room and OT for pregnant COVID-19 positive patient in labour with negative pressure system
- Neonatal resuscitation corner should be located at least 2 meters away from the delivery table.
- Labour to be managed as per standard obstetric practice.
- Delivery to be attended by minimum number of skilled persons taking full protection, additional personnel should wait outside the DR/OR and be given a cue to enter if needed.
- WHO and CDC endorse delayed cord clamping and early skin-to-skin contact in neonates born to mothers with COVID-19.

### **3. How to manage babies of COVID positive mother/ COVID positive stable babies > 34 weeks in immediate post natal period?**

Ans :

- Positive mothers after delivery of their healthy babies, without need for maternal critical care or neonatal care, ( babies may be positive or negative for COVID ) should be kept together in the immediate postpartum period in a separate isolation ward ( Covid post natal ward )
- The dyad to be isolated from other suspected and infected cases and healthy dyad.
- Mothers should hand wash frequently and wear mask.
- A healthy willing family member who is not positive for COVID 19 and is not under direct contact may be allowed in the room for support
- If safe, early discharge to home followed by telephonic follow up or home visit by a designated health care worker may be considered

### **3 A .Where to keep a healthy stable baby of a covid positive mother if the mother is sick?**

Ans : The baby should be kept in well baby covid ward ( separate isolation ) with feeding with EBM or formula.

#### **4. What is the recommendation for breastfeeding?**

Ans:

- Direct breastfeeding possible for stable babies of stable positive mother.
- Exclusively breastfeed for first 6 months. Initiate breastfeeding within 1 hour of birth.
- Breast milk may be beneficial by providing protective antibodies against SARS-CoV-2 infection.
- If the mother is separated from the baby, mothers who intend to breastfeed should be encouraged to express their breast milk with the help of dedicated breast pumps ( avoid sharing of pumps) and expressed breast milk can be fed by healthy care giver.
- Hand hygiene and droplet protection mandatory before each feeding or other close contact with her new-born.

#### **5. What is resuscitation protocol for delivery of COVID positive or suspected mother?**

Ans :

- Resuscitation of neonate should be done in a separate adjacent room or if not feasible, the resuscitation warmer should be physically separated from the mother's delivery area by a distance of at least 2 meters separated by curtain.
- Personnel should attend with a full set of PPE including N95 mask.
- Mother should perform hand hygiene and wear triple layer mask.
- Delayed cord clamping and skin-to-skin contact.
- Neonatal resuscitation should follow standard guidelines, less aerosol generating procedures
- NRP to follow standard guidelines
- If PPV is needed – use self inflating bag or T piece with disposable tubing
- Avoid routine oral/nasal suction
- ET administration of medications to be avoided.
- Transport to NICU if required, along a predetermined path in a closed incubator with minimal exposure to other personnel. The whole pathway to be sterilised after transport.

#### **6. What is exposure in newborn?**

Ans :

A neonate born to mothers with a history of COVID-19 diagnosed within 14 days before or 28 days after delivery  
Or If the neonate is directly exposed to close contacts with COVID-19.

### **7. What is COVID 19 isolation NICU/SNCU?**

Ans :

- Isolation NICU/ SNCU should be created, which should be as well equipped with gadgets and adequate skilled staff separately for this section.
- separate isolation -single closed rooms
- Should be separate from the usual NICU/SNCU
- If single rooms not available, closed incubators/warmers could be placed in a common isolation ward ( isolation bed ) away from other beds
- The beds should be at a distance of at least 1 meter from one another
- Should have double door entry with changing room and nursing station
- Negative air borne isolation rooms preferred.
- Isolation room should have adequate ventilation
- If room is air conditioned , ensure 12 air changes/hour and filtering of exhaust air

### **8. What are the admission criteria of COVID isolation NICU/SNCU?**

Ans :

- Unstable neonates of COVID-19 positive / suspect mothers from the Delivery room
- Unstable COVID-19 positive babies  
(If feasible, suspect or exposed babies and positive babies can be separated in two corners: Covid suspect isolation and Covid positive isolation)

### **9. What are the neonatal covid symptoms?**

Ans:

- Most infected neonates are either asymptomatic (20%) or have mild symptoms such as rhinorrhea and cough (40%–50%) and fever (15%–45%)
- Moderate to severe symptoms such as respiratory distress (12%–40%), poor feeding, lethargy, vomiting and diarrhea (30%), and clinical evidence of multi organ failure have been observed as well.
- Laboratory markers: leukocytosis, lymphopenia, thrombocytopenia, and elevated inflammatory markers.
- Neonatal multi-system inflammatory syndrome (MIS-N) has been rarely reported.

### **10. What is the recommended testing strategy in newborn ?( with history of exposure irrespective of symptoms )**

Ans:

- Babies born to mother with COVID-19 infection within 14 days before birth
- H/o contact of baby with COVID-19 positive person (mother, family members, care givers, health care worker)

Timing of test:

- At birth/ at detection of the history of contact with positive person( within 24 hours )
- If first test is negative a repeat test - after 5-14 days of birth/exposure
- If new symptoms (RD, lethargy, seizures, apnoea, refusal to feed, diarrhoea ) appear test immediately .

**11. What is the testing strategy in symptomatic neonate ( irrespective of exposure ) ?**

Ans :

- Presenting with SARI/pneumonia that requires hospitalisation: With onset at more than 48-72 hrs unless there is some underlying illness that explains the signs and symptoms.
- If the neonate test positive repeat RT-PCR is not required.
- In severe disease : A single negative RT-PCR should be demonstrated after resolution of symptoms

**12. What supportive care is recommended for COVID positive/suspected sick neonate?**

Ans :

- Incubators are preferred over Radiant warmer for temperature regulation
- Fluid and Electrolyte management as per guidelines
- Use of antibiotic as per unit protocol
- Non-Covid pathogens to be ruled out simultaneously
- Monitoring as per NICU protocol

**13. What is recommendation about respiratory therapy?**

Ans :

- CPAP should be preferred over NIPPV or HHHFNC
- Intubation only for usual indications
- If intubation is needed
  - Pre-medication in non emergency
  - performed by most experienced
  - use aerosol box
- Inline suction device for suctioning and bacterial/viral filter fitted in the expiratory limb before the exhalation valve (ventilator) or water chamber (bubble CPAP) if feasible.
- Negative air pressure area

**14. What specific therapy is available?**

Ans :

- Supportive and includes supplemental oxygen, respiratory support, fluid resuscitation, and temperature control.
- evidence for the use of antiviral medications and steroids in neonatal COVID-19 is lacking
- use of micronutrients can be considered ( Zinc, Vitamin A, C, D)
- Adjunctive therapy such as systemic corticosteroids, intravenous immunoglobulin and convalescent plasma is also not recommended.

**15. What is the visitation policy for COVID isolation NICU/SNCU?**

Ans:

- Visitors to be screened for COVID.
- One healthy family member/mother with droplet and contact precautions may be allowed to stay for baby care.

**16. What is the visitation policy for mother to see her neonate admitted in NICU?**

Ans :

Resolution of fever without the use of antipyretics for at least 72 hrs AND  
Improvement in respiratory symptoms AND  
Negative results of a molecular assay for detection of SARS-CoV-2 in case of severe disease.

**17. What is the discharge policy for stable exposed/ suspected neonate?**

Ans :

- Stable exposed neonates: discharge with mother
- Stable exposed neonate in whom rooming in was not possible due to sickness of mother may be discharged from facility by 24-48 hrs of age

**18. What is the discharge policy for COVID 19 positive neonate?**

Ans:

- Mild to moderate clinical course ( oxygen for 3 days) : discharge after 10 days without repeating RT-PCR test
- In severe cases: a single negative RT-PCR with resolution of symptoms
- COVID-19 positive asymptomatic mother and COVID-19 positive well baby: Discharge together for home isolation. It is not necessary to document a negative swab for the neonate.
- COVID-19 positive symptomatic mother with COVID-19 positive or negative 'well' baby: Discharge baby early (3-4 days) with competent care-taker without repeating RT-PCR.

**19. Discuss the immunisation policy.**

Ans :

- Follow routine immunization policy in healthy neonates.
- Initial vaccination to be completed before discharge

**20. What is Neonatal MIS (MIS-N)?**

Ans :

Criteria for diagnosing MIS-N:

- Non specific signs like fever, lethargy and also sometimes may present with shock or myocarditis
- Mother COVID positive, baby COVID negative in presence of antibody titre.
- Inflammatory markers ( CRP, Ferritin , D-dimer , IL-6) raised , cardiac marker( Troponin –T) raised
- Treatment: Steroid for raised inflammatory markers, ivIG for myocarditis.

## **21. Policy for infection prevention and control**

Ans: INFECTION PREVENTION AND CONTROL (IPC) FOR COVID-19

General Precautions

- Follow all the steps of hand hygiene.
- Social distancing of minimum 1 meter should be maintained between the team members (doctors/nurses/support staff, mothers and patient attendants).
- Restrict patient attendants' entry inside the NICU.

### **DISINFECTION PROTOCOL**

- Wear PPE before disinfecting. If equipment or surface is visibly soiled, first clean with soap & water.
- Floors, Chairs, Tables, Door handles, Telephone, Light switches, nursing station - Once every shift, 0.5 % sodium hypochlorite.
- Stethoscope, BP cuff, Thermometer, Injection tray - After every use, 70 % ethyl alcohol.
- Follow routine biomedical waste management guidelines.

## **22. What should be the protocol for disposal of COVID-19 suspected or confirmed dead babies?**

Ans: DISPOSAL OF COVID-19 SUSPECTED OR CONFIRMED DEAD BODIES

- Health worker attending to the dead body should use PPE
- Any puncture holes or wounds (resulting from removal of catheter, drains, tubes, or otherwise) should be disinfected with 1% hypochlorite and dressed with impermeable material.
- Dead body to be placed in leak-proof plastic bag, outer side of which should be decontaminated with 1% hypochlorite.
- May be shown to willing family members at the time of removal from the isolation room or area, following standard precautions.
- All surfaces of the isolation area (floors, bed, railings, side tables, IV stand, etc.) should be cleaned with 1% Sodium Hypochlorite solution with a contact time of 30 minutes.