Newborn LDR and Nursery Considerations for Infants born to COVID19 Positive or Suspected Mothers

Last updated 4/6/20

Labor and Delivery:

Huddle:
- Pediatrician, Midwife, Ob, and Charge RN to meet ASAP
- Assess resources / rooms / staffing / mother’s condition

Room:
- LDR #1 for closest access to Nursery

Peds Presence:
Otherwise Uncomplicated Delivery:
- Pediatrician immediately available outside the room with AGP PPE ready to don if infant in distress
Peds required for other indication:
- Don AGP PPE and present in the LDR/OR

Immediate Care:
- NO skin to skin
- Delayed Cord Clamping acceptable if infant stable
- Place immediately in warmer
- Bathe w soap and water ASAP

Resuscitation:
- NRP contains many AGPs
- Occur in LDR as far away from mother’s providers as possible
- If necessary, transfer to Nursery covered if possible

AGP PPE:
- Eye protection
- N95 Mask
- Gown
- Gloves

Infant is considered a PUI

Rooming In vs. Separation:

- Women’s Health will start counseling mothers at prenatal visits about implications of COVID19 for pregnancy. If questions arise specifically for the pediatrician, they will set up a POPD phone consultation appointment.
- Because of limited staffing and resources in the OCU, SEPARATION WILL NOT BE ROUTINELY OFFERED. All feeding options will be offered, however families must understand the risks of passing the virus to the infant during close contact and feeding. Please see Talking Points for discussing and counseling families.
- Use Rooming In with Distancing as a time to educate mom and support person how to safely care for the baby after discharge home, as they will need to continue these practices at home.

ROOMING IN WITH DISTANCING
(Default)
- Mother and infant 6 ft. apart in LDR 1
- Infant in covered isolette if available
- Mask, gown, gloves, eye protection
- RN hand hygiene and change gloves in between care of mom and infant
- Mom in mask at ALL TIMES

- Breastfeeding or Pumping: Mom performs hand hygiene, washes chest, wears mask and gloves
- Formula feeding: Mom performs hand hygiene, wears mask and gloves, wears gown

- Support person had direct contact with mom. Can assist with infant care with hand hygiene, gloves, mask, and if holding/feeding infant in a gown

Feeding
* Counsel on risks and benefits*

Visitation and Support

SEPARATION
(Not routinely being offered; in case of mother’s acute clinical status)
- Infant moves to one of rooms 31-36 or other available and appropriate room
- Mask, gown, gloves, eye protection

- Expressed breast milk: Mom performs hand hygiene, washes chest, wears mask and gloves when pumping. Clean bottle with wipe after.
- Formula: No specific precautions
- RN to feed infant with PPE as above

- Person who will be caring for baby upon discharge can assist with care.
- If it was labor support person, they had direct contact with mom and must wear a mask at ALL TIMES. Assist with care with hand hygiene, gloves, mask.
Nursery Care:

- Try to batch care needs, vitals, labs, feeding support, etc. to preserve PPE and limit staff exposure
- Hep B, Erythromycin, Vit K, Newborn Screen, CCHD, glucose monitoring, and Bilirubin testing should all take place per protocol
- Hearing screen will occur in POPD at 6 week immunization visit (Mindy is training Charity and Terri), to limit more staff and equipment being used.
- Will NOT test infant for COVID19 unless symptomatic

Discharge:

- Discharge at >/= 48 hours of life
- Provide rectal thermometer and instruct on proper use
- If repeat bilis is needed within 24-48 hours, it may be beneficial to stay admitted until no further bilis necessary to limit return of PUI baby to the hospital. This will depend on census and acuity of the OCU.

Home Anticipatory Guidance:

- Please see forthcoming Discharge Instructions document to review and provide to family prior to discharge

Follow Up:

- Further discussion needed to determine follow up logistics and plan on a case by case basis
- Infant PUI status can be lifted: 14 days since end of mother’s symptoms, or 14 days since birth (whichever is longer). Therefore, safe to schedule 6 week immunization and hearing screen in POPD.
Family Friendly Talking Points:

Objective: Counsel mothers and families appropriately about the implications of COVID-19 and their newborn, and what we in Chinle Service Unit can offer to decrease transmission risk.

- Doctors are learning more about this virus every day, but there is still a lot that we do not understand about the virus at this time.
- It is unclear if the virus can spread from you to your baby while you are pregnant, but there are some cases where it seems like it might be possible.
- The highest risk of passing the virus to your baby will be after the baby is born from droplets in your cough and breath from being close to the baby or from touching the baby.
- Right now, information from other countries tells us that kids do not get as sick from the virus as adults do. However, babies less than 1 years old can get sicker than older kids. That is why you and your family need to learn how to safely take care of the baby to prevent them from getting sick.
- Currently, many hospitals, the CDC, and the AAP are recommending separating the baby from moms immediately after birth. They also recommend if this is not possible, that baby can stay in the same room as you with precautions. The WHO recommends sharing a room with your baby. Right now at Chinle Hospital we are not able to provide a separate room for the baby, but we will teach you how to take care of your baby as safely as possible to try to prevent the baby from getting the virus.
- The virus has not been found in breast milk at this time. Breastmilk offers many benefits to your baby, and might even pass along some protection to the baby from getting coronavirus. We know that putting your baby skin to skin while breastfeeding has many great benefits for you and baby, however this can also increase the risk of spreading the virus from you to the baby with close contact. If you choose breast milk as a feeding option, we will help you breastfeed or pump breast milk in the safest way possible.

Guideline Resources:

   -6 neonates studied. CSections and separation, per protocol in China. APGARs great, and infants did well clinically in immediate newborn period. PCRs negative in all.
   -2/6 high IgM and IgG, 3/6 high IgG normal IgM. IgM too big to cross placenta, raising suspicion for virus crossing placenta and infecting fetus.

   -1 newborn studied. CSection and separation, per protocol in China. Born 3.5 weeks after mom’s first symptoms. Apgars 9/10. IgM and IgG elevated at 2 HOL, PCR x 5 negative. Unsure how infant did clinically? Does not mention infant was ill, but infant was admitted for 3 weeks, which raises suspicion infant didn’t do well...? -Again, IgM too big to cross placenta, raising suspicion for virus crossing placenta and infecting fetus.

   -33 neonates studied. CSection and separation, per protocol in China. 3/33 had positive PCRs.
   -2 infants with pos PCR had fever and lethargy within 48 HOL, but stable by DOL7. CXR showed pneumonia. No Abx were started. PCR neg by DOL 6-7.
   -1 infant with pos PCR was 31 weeker and had enterobacter bacteremia, so difficult to draw conclusions from that patient. None of the 33 infants required mechanical ventilation.
   -Important to note that some of the 30 infants with negative PCR still had symptoms - 3 (10%) with RDS, 6 (20%) got Abx (maybe for chorio...?). Not much info on these babies otherwise.
   -Because precautions taken during delivery and infants separated, raises possibility of in utero transmission in the positive infants.

   -Only abstract available, I can only find the main text in Chinese. Be on the lookout for GI symptoms in kids is the takeaway - this case report had emesis and PO refusal. Unclear what DOL sx started.

   -1 neonate studied. CSection, separation per protocol. Born 1 day after symptoms started. Good Apgars. Emesis with first feed, then did fine with feeding. PCR positive in infant at 36HOL. Lymphopenia, elevated AST. CXR with “thickened lung texture” and Chest CT abnormal, but never developed resp sx or fever! Breast milk negative. Mom’s peritoneal fluid positive.

   -7 neonates studied. CSection per protocol in China. All had good APGARs. 3 were tested and “observed.” 4 were not tested and “discharged” - home with mom...? Unsure.
   -1 was positive at 36 HOL, mild resp distress that recovered quickly, no fever.
   -All 7 neonates doing well by 4 weeks of life - this is the biggest take away for me.

-2 neonates studied. CSections and separation per protocol.
-2: Delivered 8 days after symptoms started. Good Apgars and neg NP swab. Developed pneumonia, lymphopenia but unclear what day of life this was. Treated with Abx, improving after 2 days.
-Neg testing of placenta, cord blood, amniotic fluid, vaginal secretions, breast milk in both

-4 neonates studied. 3 CSec, 1 vaginal, all separated, none breastfed.
-2 had rashes: 1 was maculopapular over whole body with later desquamation. One was red small papules on forehead, resolved on DOL10.
-1 had TTN requiring CPAP but improved.
-All good apgars. Overall sounds like the babies did well at follow up.

9 pregnant women. All CSection. All babies did well clinically, but limited information. Negative amniotic fluid, cord blood, infant OP swab.

10 neonates studied (1 set of twins). All NP swabs negative
-9/10 were symptomatic! 6/10 resp distress, 2/10 feeding issues, 2/10 fever, 2/10 Gi bleed, 1/10 rash 1/10 died.
Overall, seems like these babies did worse than other papers! But also 6/10 were preterm 31-34 weeks, so I think this may have been why they did worse.

11. It is my understanding that Italy is NOT routinely separating newborns (I found their government’s guidelines last week, but now I can’t find the link...ugh!). However, we have limited case information or data from them about how these babies actually did.