

October 2019 Grand Rounds

Title: Rural Newborn Care

Presenter: Brandon Ferguson, MD, Family Physician, Core Residency Faculty for the Hidalgo Medical Services FMRP

Date: October 24th, 2019

Time: 1 pm ET (10PT, 11MT, 12CT)

Pre-session Activities

1. Read Chung (2017), *Current scope of practice for newborn care in non-intensive hospital settings*:
<https://hosppeds.aappublications.org/content/7/8/471>
2. Answer the pre-session questions, based on the reading. Bring a print-out of your responses to the Grand Rounds event.
3. Prepare for the team activity by selecting a small rural or Critical Access Hospital in your state (see instructions below).

Pre-session Questions

1. Up to ____ of term newborns develop jaundice in their first week
 - a. 60%
 - b. 48%
 - c. 20%
 - d. 33%
- 2: The minimum criteria for infant discharge include stable vital signs for more than _____ hours and a minimum of _____ successful feedings.
 - a. 24, 3
 - b. 6, 2
 - c. 12, 2
 - d. 10, 3
- 3: Which of the following is NOT a newborn bedside surgical procedure?
 - a. gastrostomy
 - b. circumcision
 - c. accessory digit ligation
 - d. sublingual frenotomy

4: The leading cause of neonatal sepsis and meningitis in the United States is:

- a. Herpes Simplex Virus (HSV)
- b. Hepatitis B
- c. Non-polio enteroviruses
- d. Group B Streptococcus (GBS)

5: The recommended Newborn Screening Panel contains 32 core disorders and 26 secondary disorders:

- a. true
- b. false

Team Activity Prep

During the Grand Rounds event, your team will discuss the *Baby E* Case. If you do not already work at a small rural or Critical Access Hospital that provides maternity care, use the following link to select a Critical Access Hospital in your state that offers maternity care.

1. Go to the Flex Monitoring website and filter the list of CAH's by State:
<https://www.flexmonitoring.org/data/critical-access-hospital-locations/>
2. Choose from the list a CAH in your state that is likely to offer maternity care (Clue: look for a CAH that is an hour away from a large city that is likely to have a neonatal intensive care unit or NICU)
3. Google the name and address of the hospital, look under the "Services" tab or search the hospital site for "Birth" or "Maternity"
4. See what you can learn about the kind of maternity and newborn care that is offered.
5. Using Google Maps, calculate the distance from the CAH to the closest NICU.

For more information regarding Critical Access Hospitals including state maps, visit RHIhub:
<https://www.ruralhealthinfo.org/topics/critical-access-hospitals>

Baby E

You are on call to round in the nursery at your small, critical access hospital and are notified of a baby that was born yesterday that needs to be seen this morning. Baby was seen by the pediatrician yesterday and he reports the following:

Hx: Baby E is a 1-day-old Female infant born at 39 and 3 weeks GA via primary C-section due to breech presentation to a G3 now P3 mother. Mother had Early Prenatal Care (beginning in the 6th week of pregnancy), and her pregnancy was complicated by GDM, which was diet-controlled. Mother's Pre-natal labs were normal, and her blood type is O+ Abs -. Baby's Birth Weight is 3030g, which is AGA. Baby is having some difficulties latching; however, Mother is adamant on breastfeeding, and the nurses report that the mother does have good colostrum supply.

Day of life 1:

You review the chart and note a transcutaneous bilirubin that is WNL and low risk. Baby has had 3 blood glucose measurements greater than 60, weight is down 4.4%, and the nursing staff reports continued difficulty latching. Baby is voiding and stooling normally.

Your exam is normal except for a 3/6 harsh holosystolic murmur best heard at the lower left sternal border. There is no cyanosis or diaphoresis on exam and no increased work of breathing, and Mother denies any of these symptoms during feeding as well. Vitals are all WNL.

Given normal vitals, no respiratory distress and no cyanosis, you and the parents decide on watchful waiting and a lactation consult is called to aid with difficulty latching.

Day of life 2:

Transcutaneous bilirubin remains low risk. Weight is now down 9.4% from birth weight. 3/6 harsh holosystolic murmur is unchanged. Baby continues to void and stool normally. Again, there is no respiratory distress, cyanosis or diaphoresis on exam; however, the lactation consultant reports a normal latch but notes some mild grunting while feeding.