



Pediatric Pearl

Date: 3/29/24

Care of the Newborn

Prenatal care:

1. **Who should get the Tdap vaccine to protect the infant?:** the mother, during each pregnancy, to transfer passive antibodies against pertussis, to the newborn. Also other family members and close caregivers are recommended to be up to date on Tdap at least 2 weeks prior to contact with the newborn.

What questions should I ask about the delivery or should I be noting from the newborn

discharge summary: please make sure you get this important document and review before the newborn visit:

1. Maternal history, substance use, medications, was all their testing negative (e.g. for HIV, RPR, GBS status, Hep B)

2. Delivery: SVD vs planned c-section vs emergency c-section. Was a vacuum used. Was any resuscitation required for the infant. Was the infant breech (can increase risk for hip dysplasia). Note: delayed cord clamping of 30-60 seconds is now standard of care

2. Gestational age

4. Is the infant SGA/LGA: this carries increased risk for hypoglycemia that can persist up to 10 days of age

3. Apgar score

4. birth weight, discharge weight : you can enter these into the vitals section

5. Did they get

-Vitamin K: to prevent hemorrhagic disease of the newborn (infants have low vit K reserves as it does not cross the placenta)

-prophylactic erythromycin ointment: to prevent gonococcal ophthalmia neonatorum

-First Hep Shot: pls have your staff enter this into their vaccines so nursing knows the first has been done

-newborn screen completed

-hearing screening done: sometimes they recommend a repeat

-congenital heart disease screening: checking preductal (right hand) and post ductal (either foot) pulse ox after 24 hrs of age: positive screening is when either extremity is < 95% or there is a difference of > 3% between the upper and lower extremity.

6. Any monitoring for NAS (neonatal abstinence syndrome)

7. Review any notes from the newborn hospitalist about follow-ups recommended: i.e. higher risk bili level that needs to be monitored, exam finding that need to be followed up on, is hip ultrasound recommended.

Weight: How is weight gain: Weight loss is normal initially. If you have a discharge weight from the newborn nursery, it can be reassuring to see if the infant has gained since that discharge. Calculate % weight loss. 10% or more weight loss is a little more concerning and infant should have close follow up. (i.e. in 1 week or less). We typically expect infant to be back or close to birth weight by 2 weeks.

-Normal weight gain for the first 3 months of life is 20-30 g /day

-if you are worried about % weight loss, other questions you should be asking to make sure that things are going to turn a corner are:

-if breastfeeding, has your milk come in?

-are stools transitioning (away from tarry black/green to mustard yellow)

-how many wet diapers (we expect 1 per day of life (e.g 2 diapers on DOL 2, 3 diapers on DOL 3, until too many to count)

What are important questions to ask/topics to discuss with the parents at the visit:

Feeding:

-Is breastfeeding important to them and how can we help support them (the birth center at BFMC has a drop-in support group with lactation consultant every

Wednesday. Breast milk typically comes in on day 3-5 after delivery

-Expected volumes if bottle feeding: 5 ml q2-3 hrs on day 1, quickly increase to 30 ml (1 oz) per feed by day 5. By the time the infant reaches the end of the newborn period

(1 month) we typically expect them to take ~ 4 oz every 3-4 hrs (or about 24-30

oz/day) Volumes should not really need to increase from this point on. They will have enough calories until they start supplementing with solids at about 6 months.

Pees and Poops: see above. the first bowel movement should occur by 48 hrs of age (this will usually be noted in the discharge summary(a delay can be concerning for Hirshsprung disease or cystic fibrosis). Note that frequency of stools especially after the first few weeks and especially in breastfed babies, can vary considerably—can go 1-2 week without a stool and can be normal. As I was taught, any color, but red (i.e. blood), of stool is normal

Safe Sleep

Encourage smoking cessation for parent

Swaddling: discontinue by time infant is starting to roll

Tummy time: start early and do regularly

Soothing: 5 S's: sucking, swaddling, swaying/swinging, shushing, side/stomach lying (with parent present), you cannot spoil a newborn with too much touch. Let parents know about The Period of Purple Crying. Crying peaks at ~ 6 weeks of age. There is no evidence for over the counter medications like gripe water/simethicone

Supplementation: infants who are exclusively, or mostly, breastfed, should be given 400 units of vitamin D daily. Or breastfeeding parent should take ~ 6400 units /day. There is an official recommendation by the AAP that exclusively breastfed infants should begin iron supplementation at 4- 6 months at 1mg/kg/day until they have a diet containing iron rich foods. I believe this is somewhat controversial. I don't typically recommend iron supplementation unless premature infant or concerning screen at 9 months.

How are parents feeling: do they have support; are they struggling with anxiety, depression.

Exam

Skin: jaundice recedes up the body so you can assess the severity of the jaundice based on how low down on the body it is seen; Jaundice just of face is mild. Jaundice below the belly button is more concerning. Physiologic jaundice usually peaks around day 3-4 of life.

Head: check for cephalohematoma (does not cross sutures) vs caput succedaneum (edema of the scalp) vs subgaleal hemorrhage (will cross suture lines. This is a risk when a vacuum is used)

Eyes: red reflex, remember blocked tear ducts are common and do not usually need to be treated (see pediatric pearl on this)

Ears: position of the ears and check for external ear abnormalities like pits, tags, or brachial cleft cysts

Mouth: use a gloved finger to check that the palate is intact, evaluate for strong suck reflex and for any obvious tongue tie

Neck: palpate for masses (hematomas, webbing, thyroglossal cysts, and brachial cleft cysts), palpate clavicle for fracture

Respiratory: make sure no signs of respiratory stress (nasal flaring, grunting, retractions or central cyanosis)

Heart: check brachial and femoral pulses to rule out coarctation, listen to heart for murmurs

Abdomen: observe umbilicus for any sign of infection or umbilical granuloma; palpate abdomen to make sure soft/no masses

Extremities: check for normal palmar creases and digits and hip exam to evaluate for clicks and clunks (see pediatric pearl on developmental dysplasia of the hip), club foot

Genitourinary: evaluate for any ambiguous genitalia, female infants may have small amounts for vaginal discharge or bleeding due withdrawal from maternal estrogen; males should be evaluated that testes are descended and no evidence of hypospadias or other penile abnormalities.

Anus: patent and no sacral dimples

Neuro: reflexes to check: Moro, grasp, suck, rooting, stepping, babinski; does the infant have good tone; i.e. generally in flexion

Visits/Follow-ups: We should be striving to see newborns by day of life 5. Make sure reception is aware it is a priority to get the infant in. I overbook if necessary. Follow up after first visit depends on weight gain and parent comfort level. Will typically follow up in 1 week to make sure weight gain well established and after that, may or may not do 1 month visit depending on parent comfort level/or my own concerns.

Resources:

<https://med.stanford.edu/newborns.html> : this Stanford newborn nursery website is a great resource; has useful photo gallery and great info/videos on breast feeding. I often share with parents who want to breastfeed

<https://bilitool.org>

<https://www.immunize.org/>: my go to resource for parents' questions about vaccines.

<https://solidstarts.com/>: a little beyond the newborn age, but a great resource for when infant is starting solids.

I just learned about a post-partum support group being held through CHD this April. Stop by my office if you'd like the handout.

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Source: As a template I've referred to "Care of the Well Newborn" from Pediatrics in Review 2022. If anyone would like this article, I'm happy to share.