Common Newborn Concerns

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I was born not knowing and have only had a little time to change that here and there
—Richard Feynman

Learning Objectives:
1. Understand the role of the prenatal visit in establishing a medical home
2. Describe normal newborn movements and habits
3. Understand the timing of and risks for shaken baby syndrome, and outline anticipatory guidance that may be preventive
4. Emphasize the importance of secure attachment of the child and parents early in life
5. Identify the most common benign newborn rashes and delineate appropriate guidance

Primary Reference:

Editor’s Note: This module addresses some common questions that arise during care of the healthy newborn. More extensive discussion about other topics relevant to newborn care (e.g., feeding, injury prevention, fever, infant sleep, circumcision, postpartum depression) is provided in chapters dedicated to those topics.

CASE ONE:

Rounding in the well-baby nursery, you meet José and Maria who have just had their first baby. They are a friendly young couple who are very excited about their new son, Jesús. José and Maria have a big extended family in the area, including both sets of grandparents, and they have been getting child-rearing advice from everyone. They appreciate the advice, but want to make sure what they have been told is correct. They have many questions for you.

As you sit to talk with them, little Jesús hiccups and immediately extends and shakes his arms. Maria looks concerned and asks “Is that normal? Is he having a seizure?”

1. When is the best time to address parental concerns about care of a new child?

New parents frequently harbor anxieties about their new role. During the initial interaction with new parents, whether in the nursery, a prenatal “interview” visit, or an office visit, the provider may wish to reassure parents that concerns are normal. Encouraging parents to ask questions, and defining your role as a source of reliable information to answer their questions will serve to stimulate future dialogue. In a study by Eisenberg, et al., the authors found that doctors were the most prevalent source of reported advice on infant care practices. However, advice from family or media was common (20% to 56%) and this advice was often inconsistent with medical recommendations.

While the initial interaction with the child’s healthcare provider often occurs in the newborn nursery, the prenatal visit offers a chance to build trust and rapport in a more familiar environment (i.e., office vs. hospital) when parents are better rested. The AAP highlights the role of the prenatal visit in a 2018 statement. During this visit, primary care providers can help expectant families prepare for their baby, establish a medical home, and develop a positive clinician-family relationship. The visit gives the clinician the opportunity to gather information about the prenatal and family history, and discuss anticipatory guidance that has relevance before the baby is born (e.g., positive parenting, what to expect in the hospital, newborn screening, initiating breastfeeding, circumcision). Families can be connected with community resources and learn about the importance and schedule of routine office
visits. A prenatal visit can range from a full in-person visit, to a briefer introduction to the care team, to a phone call. An in-person prenatal visit should be covered by most insurance but may require some advocacy with third party payors.

2. What do you say to José and Maria about Jesús’ movements?

José is likely exhibiting a normal Moro reflex. Primitive reflexes are present in normal newborns and extinguish over time as the nervous system matures. Reflexes that are absent or that persist beyond the expected time of extinction suggest underlying neurologic dysfunction or musculoskeletal injury. Many providers like to demonstrate primitive reflexes, such as the Moro, grasp, and stepping reflexes, to parents during the exam. The rooting reflex is often the first to be inhibited, at around 1 month of age, while the palmar grasp will last for 2-3 months and the Moro can last 5-6 months after birth.

Hiccupping in utero will often persist into the newborn period. Anticipatory guidance that hiccupping is normal and does not indicate feeding intolerance, choking, or difficulty breathing is warranted. Sneezing in the newborn period, as a mechanism for clearing the nares, is also common. While newborns can contract upper respiratory infections, sneezing is not commonly a sign of illness in the first weeks of life. Because these actions are often more upsetting to the parents than to the infant, reassurance that these are considered normal behaviors is prudent.

CASE continued:

José and Maria seem relieved to hear that Jesús is acting normally. Maria is planning to breastfeed and has been working with the hospital lactation consultant. As you discuss breastfeeding, Maria remembers that she wanted you to look at Jesús’ nipples. They seem larger and firmer than she would have expected.

3. What are you most likely to find when you examine his nipples?

Breast buds are seen commonly in newborns of both sexes due to the effects of maternal estrogen, and some infants may even have a small amount of milk secretion. These benign conditions spontaneously regress over the first few weeks of post-natal life as levels of maternal hormones decrease in the neonate.

Newborn girls frequently display vaginal discharge as well as withdrawal bleeding between the 4th and 7th day of life due to the effects of diminishing maternal hormones. This discharge differs from “brick dust,” a reddish/brown discoloration seen on the diaper caused by urate crystals in the urine, which is normal in the first few days of life and seen in both males and females.

4. What should you tell parents about bathing their infant, cleaning genitalia, and cord care?

Infants can be bathed as infrequently as once a week as long as parents are using good diaper changing practices. Many clinicians recommend avoidance of commercial pre-moistened wipes in the first two to four weeks of life, as they can cause a contact dermatitis in fresh newborn skin. Warm water on a clean, nonabrasive cotton cloth is more than sufficient for early cleaning of the diaper area. Infants should not be submerged in water until the umbilical stump has fallen off and the umbilicus has completely healed which takes about a week to ten days. Parents should be reminded to never leave a baby unattended in any amount of water.

Girls should be cleaned between their labia to remove stool from the urethral area. As mentioned above, some vaginal discharge (clear, white, or bloody) is normal in the first few weeks. Boys have longer urethras (so have more protection against urinary tract infection) but still should be wiped thoroughly. Uncircumcised boys should not have their foreskin forcibly retracted to clean; this can cause pain and bleeding since the newborn foreskin is adherent to the glans. These adhesions spontaneously break as boys have nighttime erections, and by school age most boys can retract their foreskin. If circumcised, once the circumcision has healed, no additional care is needed other than wiping the area clean with a wet cloth. Many boys will have exfoliated epithelial cells stuck under their foreskin or near the circumcised area. Parents can be reassured that this normal collection of cells will resolve on its own, but should be instructed to contact the provider if signs of infection
develop (e.g., redness, swelling, apparent pain with diaper change). For more information on circumcision, please see the chapter dedicated to this topic.

The cord stump should be kept clean and dry until the area heals. Neither triple dye (brilliant green, proflavine hemisulphate, and crystal violet in aqueous solution) nor alcohol wipes are necessary, and have been shown to prolong the attachment of the cord to the umbilicus. Parents should watch for periumbilical erythema, tenderness, or purulence that might indicate omphalitis, an acute inflammation of the umbilical stump usually caused by infection. The severity of omphalitis can range from local infection to abdominal wall cellulitis or necrotizing fasciitis; thus afflicted infants are usually hospitalized for therapy and observation.

CASE continued:

During your exam, José asks you for your opinion on getting his son’s ears pierced, pointing to his own ear, “so we can match!”

5. What is known about the recommended timing and safety of ear piercing in children?

Ear piercing in infants is common, and there is no consensus on optimal timing. The AAP recommends postponing ear piercing until the parents feel that the child is mature enough to take care of the pierced site independently, however if done carefully and cared for conscientiously, there is minimal risk to the child at any age. Before getting their child’s ear pierced, parents should be counseled on the known complications, which include unwanted cosmetic effects, foreign body aspiration, allergy sensitization, keloid formation, self-inflicted trauma, and infection. Some pediatricians suggest waiting until after the initial tetanus vaccine series (6 months), though this recommendation is not evidence-based. Parents should be advised to select an experienced technician or healthcare provider to perform the piercing (some provider’s offices offer the procedure) and to use a ball-shaped, nickel-free first earring. Prior to the procedure, a disinfectant, such as rubbing alcohol, should be applied to the area. After the piercing, rubbing alcohol or an antibiotic ointment should be applied to the pierced ear twice a day for a few days. The earrings should be rotated gently every day, and the initial earring should be left in place for 4-6 weeks.

CASE continued:

During your exam, Maria asks you about the red rash she noticed on Jesús’ chest and back. She is worried that he might have an allergy to something.

6. What are some common benign newborn skin conditions and what should you tell parents about managing them?

Erythema Toxicum Neonatorum (ETN): Typical lesions consist of erythematous papules that can sometimes evolve into pustules with an erythematous base that may be present at birth but more commonly appear on the second or third day of life. Lesions may be found on face, trunk, extremities and back. About 40-70% of newborns may develop ETN. The diagnosis is clinical but if extensive and worrisome in appearance may be confirmed by cytologic examination which shows a predominance of eosinophils. The exact etiology is unknown. Lesions fade over 5-7 days but may persist for weeks and no treatment is needed. Of note, parents may appear worried at the mention of “toxicum” so the skin condition may also be referred to as erythema neonatorum.

Transient Pustular Melanosis: Lesions appear vesiculopustular without an erythematous base and are more common in ethnicities with darker skin pigmentation. The lesions, which typically appear on the back (especially sacrally) or in the “T-zone” of the face, rupture easily and leave first a collarette, and then a hyperpigmented macule giving an appearance of “freckles” that fade over 3-4 weeks. No treatment is needed.

Milia: These are 1-2 mm pearly white papules found most often on the forehead, cheeks, nose, and chin and are caused by retention of keratin within the dermis. Up to 50% of newborns have milia, which typically disappear spontaneously in the first 1-2 months. No treatment is needed.
**Nevus simplex aka “stork bite” or “angels’ kisses”:** This is a vascular birthmark that can be seen in up to 33% of newborns. The lesions are flat and salmon-colored and their borders are typically diffuse/ill-defined and irregular. They can be found on the eyelids, forehead, and nape of the neck, and are caused by telangiectasias in the dermis. Most resolve by 18 months of age as the epidermis thickens.

**Nevus flammeus aka port wine stain:** This rare (0.6% of births) vascular birthmark due to capillary malformation is deeper in color than nevus simplex, has a more well-defined border, and typically does not cross the midline. If the nevus flammeus is located in the distribution zone of the ophthalmic (V1) trigeminal nerve, the infant should be evaluated for glaucoma. Infants with this distribution are also at risk for Sturge-Weber syndrome, the triad of nevus flammeus, glaucoma, and seizures due to CNS angiomas. Even if not in this distribution, referral to a dermatologist is recommended.

**Dermal melanosis:** Previously known as “Mongolian spots”, this is a bluish-gray pigmented birthmark resulting from an accumulation of melanocytes deep in the skin. Dermal melanosis occurs most often on the lower back or buttock area and is more common in ethnicities with darker skin pigmentation including Black, Asian, Hispanic, and Native American populations. Lesions generally fade by 2 years of age without intervention. Documentation of dermal melanosis is important because the appearance can be mistaken for bruising.

**CASE continued:**

*Jesus looks perfect by your exam, but begins to cry at the very end of it. You swaddle him snugly and hand him back to María, but he continues to cry. José jokes that “I guess we’ll have to get used to lots of crying now - if it doesn’t drive us crazy first!”*

7. **What sort of anticipatory guidance can you give these new parents regarding crying? What might be some effective strategies to cope with this?**

Crying is a normal part of an infant’s development and does not always indicate a problem with the infant, or with the caregiver’s ability to meet the infant’s needs. Crying becomes more frequent starting at age 2 weeks and typically peaks at 2 months of age. During this time period, crying can occur unexpectedly without obvious provocation, and often occurs at the same time every day (late afternoon/evening is common). At the peak of crying behavior, it is normal for a crying bout to last long as 2 hours, and 25% of infants cry for more than 3.5 hours each day, despite a parent’s best efforts. These behaviors are often referred to as “colic” but some discourage using this terminology to describe every fussy baby, to avoid implying pathology to parents when in fact their infant is completely developmentally appropriate. It is important to encourage parents to ensure that the child’s basic needs have been met (i.e., feeding, clothing, warmth, dry diaper) and that there are no overt physical signs of pain or illness; but assuming an otherwise normal assessment of the infant, such crying can be considered a normal newborn behavior.

Helpful techniques to help soothe a crying infant include gently swaying or swinging the infant in the parent’s arms, or in a rocking chair, bouncy seat, cradle, or infant swing; in the parent’s arms holding the infant in a side-lying position may be helpful. Swaddling provides infants with the tight sense of warmth and security they had while in utero. Quiet “shushing” and singing can provide comfort to the infant, especially as they become able to recognize familiar voices. Finally, the action of sucking, as with pacifier use, can be soothing. This pattern is colloquially known as the 5 S’s - swaddle, suck, side, sway/swing, and shush.

A significant risk associated with “fussy” infants is increasing parental frustration that can lead to behaviors such as shaking the baby. Abusive head trauma, also known as shaken baby syndrome (SBS) is the most common cause of traumatic death in infancy and is a significant cause of morbidity in children under 2 years of age. Incidence of abusive head trauma is estimated to be 30 cases/100,000 infants less than 1 year of age.

Given the above data, many efforts have been made to provide caregiver education regarding infant crying and SBS prevention. Barr, et al. showed that improved parental knowledge of the characteristics of normal crying following a public health prevention program targeting new parents significantly reduced emergency room visits for crying complaints in the early months of life.
Educating caregivers that conventional methods of infant soothing are not always effective in reducing crying is a key tenet of the SBS prevention movement. An intervention known as the “Take 5 Safety Plan for Crying” has been studied and validated by Bechtel, et al., and involves healthcare providers using the following script with families of newborns during the weeks and months following the birth of their child:

If a caregiver becomes frustrated with an infant’s crying, he or she should:
1. Put the infant down on his/her back in a safe place, such as the crib or bassinet.
2. Walk out of the room.
3. Do something to relax or calm down (e.g., meditation, listen to music, doing chores, reading).
4. Call a family member, friend, or infant’s physician to seek help in dealing with crying. If the caregiver wishes to leave the home to calm down, someone should be called over to watch the infant in their absence.
5. Not return to the infant’s room until calm enough to care for the infant.

Caregivers are advised specifically that crying is a normal part of an infant’s development and does not always indicate that there is something wrong with the infant or the caregiver. They can be reminded “never to shake the baby”, and to remind others never to shake the baby. A reminder can be given that crying does not hurt infants, but that shaking can seriously injure them.

Caregivers who received the Take 5 intervention were significantly more likely to say that they would take a break, and were less likely to say that they would try to continue to soothe the infant if frustrated with crying. These results are similar to those demonstrated by Barr, et al. who showed that caregivers who received materials from the “Period of Purple Crying” initiative (see Resources) were also more likely to step away from an inconsolable infant in order to calm themselves.

Using the words “do not shake your baby” can seem like an awkward conversation to have with parents, new or seasoned, but the importance of having this discussion cannot be understated. Acknowledging a loving parent’s desire to do everything possible to protect and care for their infant is often a good starting point for this topic.

CASE continued:

Three days later, you see Jesús and his parents in your office for a weight check. Jesús is just under his birth weight and gaining. Overall things seem to be going well at home, but when you ask how they are adjusting, Maria admits to you that she just wants to hold the baby but that her mother is telling her that she’ll “spoil” Jesús.

8. Can you spoil a baby?

No! Infants need the security and certainty that comes from gradually understanding that the parent is someone who can be trusted and depended upon for warmth, security, and love. Children who are well attached gain socially, cognitively, and emotionally. The task of the pediatric provider in this case is to reframe the “spoiling” of the child as responsive parenting, where parents begin to see themselves as warm and responsive to child signals, and gradually learn to adjust the degree of control over the child as he grows - for example moving from moment-to-moment responsiveness to gently beginning a routine over the first 6 months of life. These precepts may assist parents in developing an authoritative parenting style, as opposed to authoritarian or permissive, a style which is associated with better interpersonal and educational outcomes.

Additional References:


Resources:
2. General information regarding infant care. www.mayoclinic.com/health/healthy-baby/FL99999
4. Period of Purple Crying. www.purplecrying.info

Acknowledgment:
The current author would like to thank Drs. Emily Gritz and Andrea Rock for their work on a previous version of this chapter.