

Not All Stool Discussions Are Unproductive

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On August 22, 2014, a baby girl was born healthy and at full term. She was discharged on August 24 after a routine hospital stay. A day later, the infant's mother called the pediatrician's emergency after-hours hotline, in distress. She was concerned because the infant had not had a bowel movement since August 23. She was also concerned that each feeding was lasting an hour. A nurse told the mother that her concerns would be discussed in a routine follow-up appointment scheduled for the next morning.

At the appointment, the pediatrician noted the infant was having feeding problems and had lost 11% of her at-birth weight. The pediatrician also noted a high respiratory rate and abnormal skin coloring. However, the pediatrician concluded that the infant's feeding problems had resolved, reassured the parents she was healthy, and discharged her, telling her parents to return in 2 weeks.

On August 29, the mother again called the pediatrician's office, this time with concerns over a decrease in the infant's feeding. A nurse told her to bring the infant to the emergency department (ED). At the ED, the infant was found to have lost 12% of her weight since birth and to be severely dehydrated. Due to hypovolemia, health care providers could not complete lab tests on the infant until aggressive resuscitation had been performed for 4 hours. The infant's lab values showed she had hypernatremia, which put her at risk for brain injury through a decrease in cellular hydration, increased vascular permeability, or elevated intracranial pressure.

The infant did sustain a permanent brain injury from the condition: right-side paralysis. Her multi-organ failure from dehydration also caused significant damage to her left kidney, which stopped functioning altogether in 2017.

The infant sued her pediatrician and his office. Plaintiff's counsel stated that the infant's early weight

loss was a red flag and that the standard of care required the pediatrician to order in-office follow-up within 24 hours to confirm if the loss had been corrected. Plaintiff's counsel also alleged the baby's respiratory rate and poor coloring were also red flags for dehydration. He further alleged that if the infant had returned to the office, her weight loss would have prompted supplementation before the dehydration caused her brain injury.

VERDICT

The case was settled for \$1,375,000.

COMMENTARY

This case merits discussion because it involves a type of patient many clinicians see in practice. Complaints of newborn and infant feeding problems are common. Most cases require reassurance and troubleshooting about common feeding problems—but the clinician must be on the lookout for serious issues. Thus, it is helpful to revisit expected newborn feeding, stooling, and weight status.

With regard to feeding, breastfed infants should receive between 8-12 feeds per day during the newborn hospitalization.¹ Bottlefed infants should be fed 20 kcal per 30 mL of iron-containing formula. Infants are fed on demand, and the duration of the feeding should not exceed 4 hours. The volume of the feed for the first few days of life should be 15-30 mL per feed.

For breastfed infants, clinicians should be attentive to issues that can impact nutrition, including latching difficulties, pain, mastitis, blocked duct, and engorgement. These can limit nutrition and be extremely upsetting to the mother.

Stooling frequency for newborns varies and depends on whether the infant is bottle fed or breast fed. During the first week of life, infants pass a mean of 4 stools per day.² Breastfed infants may have as few as one stool per day, increasing as mother's milk production increases.²

With regard to weight loss, term infants may lose up to 10% of their birth weight in the first few days of life,

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which is typically regained in 10 to 14 days.¹ Infants born via cesarean section lose more weight, with 25% of these babies losing more than 10% by 72 hours. Of them, 76% return to birth weight by 14 days and 92% by 21 days. By contrast, vaginally born infants regain weight faster, with 86% returning to their birth weight by 14 days and 95% by the 21st day.¹

Here, the infant was term and healthy, but we are not told some important details. Was she breast fed or bottle fed? Was she born by cesarean section or vaginally? We do know she was discharged on August 24th, her mother called the hotline on the 25th, and she was seen by the pediatrician on the 26th—at which point the infant had not stoolled in 3 days. The mother called the physician's office again on August 29th and was sent to the ED. We are told only that each feeding lasted an hour and the infant hadn't stoolled.

Regarding stool—we have all had discussions with patients regarding hypervigilant concerns about stool color. We know there are some big things to look for with stool color (eg, black tarry reveals upper GI bleeding, while clay-colored or pale may reveal the absence of bile). Yet, patients' expectations of the color-coded diagnostic abilities of their stool knows no bounds. Patients are convinced that we have some color wheel in our jacket pocket corresponding to stool color—and that the nuances between shades have important medical implications. If you ask, "Would you say it is more marigold, butterscotch yellow, or Tuscan sun?" ... your patient will have an answer.

Patients reveal stool color hesitantly, reservedly, with nervous expectation. They wait for your response in quivering anticipation that the coming reply will include words to the effect that a boysenberry-purple stool is equivalent to a Death tarot card. A subconjunctival hemorrhage is the only thing that approaches the anxiety level of the oddly hued stool (Oddly Hued Stool Anxiety). Woe be the patient with both. For a patient bearing a subconjunctival hemorrhage who has also passed a jungle-green stool in the past 24 hours fully expects to explode within the next 60 minutes.

I've been rather facetious for a reason. My purpose is to acknowledge and to help you recognize that most discussions regarding stooling will not be (forgive me) productive. They are not productive because most stool coloration issues are nonentities—yet they produce patient anxiety that takes some time to address, leaving a busy clinician prone to curtly dismiss such discussions out of hand. Because many patient-initiated stool discussions aren't productive, there is the risk for stool tune-out. As gross and unproductive as they can be, don't tune out all stool discussions.

In this case, the appropriate frequency of stooling should have been at least once per day. For newborns, a stool color question is helpful; stool should not be white, pale, or clay-colored, which is suggestive of acholic stools from biliary atresia. Here, despite the absence of stool over a 3-day period, the defendant concluded the feeding problem was resolved and set a return visit for 2 weeks later. The plaintiff's expert contended that the weight loss and absence of stooling was evidence of inadequate intake and warranted a return check the next day. Rather than risk the case going to trial, the defendant settled for \$1,375,000.

IN SUM

Newborn nutrition is important. Understand that parents will be anxious about newborn feeding, although often there is no major medical concern. However, do not be dismissive of feeding concerns because of this expected anxiety. Listen to the parents fully, paying particular attention to quantifying feeding difficulty and stooling frequency matters. Don't let patients' rainbow parade of needless stool concerns blind you to considering important information. In other words, don't be a stool fool. **CR**

REFERENCES

1. McKee-Garrett TM. Overview of the routine management of the healthy newborn infant. UpToDate. Updated July 12, 2019. www.uptodate.com/contents/overview-of-the-routine-management-of-the-healthy-newborn-infant. Accessed November 18, 2019.
2. Sood MR. Constipation in infants and children: evaluation. UpToDate. Updated August 1, 2019. www.uptodate.com/contents/constipation-in-infants-and-children-evaluation. Accessed November 18, 2019.