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Take steps to improve care of newborns and reduce medical liability risks

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Newborn care represents a significant malpractice risk for pediatricians, hospitalists and neonatologists.

Nearly 50% of pediatric malpractice cases involve patients under 1 month (Jena AB, et al. *Pediatrics*. 2013;131:1148-1154). The top 10 most prevalent presenting medical conditions in closed pediatric malpractice claims include neurologically impaired infant, newborn respiratory problems and premature infant (Physician Insurers Association of America. *Risk Management Review*. Rockville, Md. 2013).

Medical liability claims in pediatrics often are described as low frequency and high severity, meaning they don't happen as often as those in other specialties, but when they do, the indemnity payments are significantly higher. Factors that often contribute to the severity of pediatric malpractice payouts are 1) high parental expectations for a healthy newborn, 2) early hospital discharge for newborns, 3) payments calculated to cover care for the rest of a child's life and 4) sympathy among jurors for disabled children.

Following are some common allegations of negligence in newborn care and suggestions to improve patient safety and outcomes and reduce the risk of litigation.

Resuscitation

Delay in attendance and/or inadequate personnel at a delivery can contribute to a poor outcome. Pediatricians should be made aware of potential high-risk deliveries and have a reliable system to communicate with the delivery room and newborn nursery staff.

Nationally, up to 10% of low-risk deliveries will require significant resuscitation (positive pressure ventilation) at birth. Therefore, every birth should be attended by at least one individual skilled in newborn resuscitation whose only responsibility is the newborn.

Ventilation of a newborn's lungs is the single most important and effective action during neonatal resuscitation. The majority of depressed newborns will respond to properly performed bag and mask ventilation, which allows stabilization while waiting for assistance from an anesthesiologist or on-call neonatologist.

Chest compressions should be initiated if the newborn's heart rate remains less than 60 beats per minute after at least 30 seconds of effective positive pressure ventilation; however, very few newborns will require chest compressions once effective ventilation has been established.

If intubation is required, the inability to intubate may result in a preventable, devastating outcome. With less exposure to the neonatal intensive care unit in residency training, the opportunity and skill to intubate is greatly reduced.

If intubation is not feasible secondary to congenital or traumatic airway compromise, a laryngeal mask is an alternative to a face mask or endotracheal tube.

If an adequate airway is established and the newborn continues to deteriorate, it would be prudent to consider etiologies such as a plugged endotracheal tube, more pressure to open up stiff lungs, right mainstem intubation and transillumination to rule out a pneumothorax.

When administering epinephrine, the dose (1:10,000/0.1 mg/mL) is dependent on the route of administration: 1 mL/kg down the endotracheal tube and 0.2 mL/kg IV. The umbilical vein is the recommended route of vascular access for a newborn in the delivery room. If there are signs of shock or a history of acute blood loss, the umbilical vein provides relatively easy access when volume expansion is required.

Cooling an asphyxiated newborn

Some negligence claims allege that if passive cooling/whole body cooling had been provided to an asphyxiated newborn within a six-hour window, a normal outcome would have occurred.

The criteria to initiate cooling can be complex and subjective. Perinatal depression with a sentinel event warrants a high index of suspicion for hypoxic ischemic encephalopathy. Delivery room physicians should be familiar with local criteria for initiating passive cooling and the six-hour window for total body cooling.

A newborn blood gas in the first hour of life can provide valuable information. A cord arterial pH <7.00 and/or base deficit <-12 should prompt immediate consultation with a tertiary center.

It is critical to document the newborn’s neurological exam, including level of consciousness, activity, posture, tone, reflexes and pupillary reaction to light.

Issues in immediate post-care period

Among the issues that can arise in the immediate post care of a newborn are hypoglycemia, sepsis and seizures.

There is a lack of consensus on the definition of hypoglycemia in newborns, whether there are risks associated with transient hypoglycemia and the ideal threshold for intervention. Physiologically, newborns’

glucose normally drops in the first hour of life. Therefore, careful documentation of the presence or absence of signs and symptoms of hypoglycemia can help in a malpractice case.

When an experienced nurse feels the newborn is not acting right, an immediate evaluation should be considered to assess for subtle conditions such as sepsis or seizures. Diagnostic tests, however, cannot replace good clinical judgment, which should be documented.

Kernicterus

Kernicterus is the only pediatric disease listed as a “never event” by the National Quality Forum (NQF). Approximately 60% of newborns develop jaundice, and levels often peak after early discharge. Careful follow-up is critical. Newborns should be examined within 48 hours of discharge, and follow-up bilirubin values for neonates should not be delayed on weekends or holidays.

Despite the NQF designation, not all cases of kernicterus are preventable. However, clear communication with parents and between providers will improve recognition of hyperbilirubinemia.

Key takeaways

- Pediatricians who are on call for newborn emergencies and attend deliveries should maintain their technical and cognitive skills through the Neonatal Resuscitation Program (see resources).
- Make sure your notes are objective, timely and accurate. Avoid inappropriate superlative modifiers such as severe, profound, prolonged or urgent.
- Physicians attending deliveries in nontertiary centers should be familiar with perinatal center agreements/state criteria to transfer a newborn to a higher level of care and contact the facility early.
- Regardless of the circumstances, always be a competent, caring, concerned and compassionate clinician. Not only is it good medical care, it will minimize professional liability.

The information in this article addresses specific conditions often found in medical malpractice claims. For comprehensive guidance on newborn resuscitation and newborn care, see resources.

Dr. Muraskas is a member of the AAP Committee on Medical Liability and Risk Management.

Resources

- “Textbook of Neonatal Resuscitation,” 8th Edition
- The Neonatal Resuscitation (NRP) eBook Collection
- “Guidelines for Perinatal Care,” 8th Edition
- Additional Pediatricians and the Law columns