Vitamin K Administration

To the Editor:

Administration of vitamin K to newborns for the prevention of vitamin K deficiency bleeding has been the accepted standard of care in the United States since 1961. However, in this era of the Internet, today’s parents are faced with an overwhelming amount of information they have to decipher, some of which is inaccurate or even blatantly false and misleading. Some parents will come to the conclusion that vitamin K is not necessary or perhaps even harmful to their newborns. As physicians we do our best to respect parental autonomy and the decisions made on behalf of their children, but have we become too quick to acquiesce to parents, especially when their decisions are based on misinformation? Have we, as pediatricians, failed our pediatric patients by being complicit with parental refusal of proven safe and efficacious interventions, whether it be vitamin K, influenza vaccine, HPV vaccine, or erythromycin eye ointment? What are the repercussions of this complicity? The resurgence of once-extinct diseases and of vitamin K deficiency bleeding, to name but a couple, are being reported with increasing frequency.

In the August issue of Pediatric Annals, the article “Refusal of Vitamin K Injection: Survey of the Current Literature and Practical Tips for Pediatricians” by Levin et al. described a cohort of six families who refused vitamin K for their newborns. These refusals occurred over a 4-month period at the same university birthing center despite the attempts by the pediatric, social work, and child protective services teams. This fact should send shockwaves throughout the pediatric community and should put us on alert that the medical community is losing the “information war.” This report is significant in that it associates, for the first time (to the best of our knowledge), parental refusal of the newborn screen with vitamin K refusal as well as posthospital discharge disposition of these newborns. Previous evaluations of vitamin K refusal reported associations with erythromycin ophthalmic ointment and hepatitis B vaccine refusal.

We must do all we can to reduce the chances of parental refusal of vitamin K, including better education and recruiting our colleagues in obstetrics to discuss the importance of neonatal vitamin K administration during prenatal visits. If there is still parental refusal, we must respectfully engage with these families, using evidence to try to persuade them that vitamin K is safe and efficacious, and its administration is necessary to prevent potentially catastrophic bleeding in their newborns. If, despite these interventions, there is still refusal of vitamin K, there must be an institutional policy to deal with this situation. In Illinois, there is a state regulation that requires hospitals to administer vitamin K as one of the conditions to maintain their licensure. This state regulation as well as the recent Illinois chapter of the American Academy of Pediatrics Committee on Child Abuse and Neglect consensus that vitamin K refusal is to be viewed as medical neglect are the foundations upon which hospitals in Illinois should create policies to address vitamin K refusal. Hospitals in other states should also look to existing laws in their states as they work toward similar policies. Although consensus on the importance of vitamin K administration was easy to achieve, we at Comer Children’s hospital have had a more difficult time regarding what to do when a parent refuses vitamin K after all attempts to persuade them have failed. Do we have the parent sign a waiver acknowledging their refusal of vitamin K or take protective custody of the newborn and administer vitamin K against the parent’s wishes? We ultimately decided that the best interests of the newborn would be best served with the latter.

The arrival of a newborn should be a time of joy for the family. We can hopefully avoid conflict and an adversarial relationship with the family if we do everything possible to mitigate the chances of vitamin K refusal. Our colleagues in obstetrics can help greatly by beginning the discussion around vitamin K during prenatal visits. Nursing and other health care staff should be consistent with their messaging regarding vitamin K. Pediatric providers can continue to educate and discuss the safety and efficacy of vitamin K and the risks of unexpected internal bleeding, including intracranial hemorrhage, and possible death in newborns if vitamin K is not administered. If, despite all efforts there is still parental refusal of vitamin K, then hospitals should have a written policy to support their medical staffs and provide the means for administration of vitamin K to newborns without the consent of parents.

REFERENCES


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Response:
We thank Dr. Lysouvakon for his thoughtful comments regarding the University of Chicago’s new policies surrounding vitamin K refusal. We agree the best policy involves an interdisciplinary team with committed experts in each specialty (ie, pediatrics, obstetrics, child protective services) working to institute a clear, multipronged, evidence-based protocol. The policy the university ultimately adopted is to (1) open a proactive dialogue and provide educational materials for parents early in the prenatal period and, if need be, (2) take protective custody and administer the vitamin K intramuscular medication within a few days of birth. Although this policy may seem harsh to some, we feel a newborn’s well-being takes precedence over parental preference.

We as pediatricians must collaborate with our obstetrician colleagues to ensure there is culturally appropriate, thoughtfully executed education early in pregnancy. We should provide materials that target and refute the most common reasons for refusal, which are synthetic/toxic ingredients, excessive dose, and side effects. We must also be mindful of varying concerns between patient populations, as exhibited by the families we encountered, which were quite different from the population currently described in the vitamin K refusal literature. We can draw support from the literature battling vaccine hesitancy, which recommends using direct and compassionate discourse to debunk common misconceptions. Using common terms such as “brain bleed” and “brain damage,” and having direct, honest conversations with parents could be the most effective tactic.

Vitamin K refusal is a growing area of concern in the pediatric literature. We need to take swift action to implement concrete plans at hospitals for situations involving resistance to vitamin K administration. We also need to develop an effective system to track refusals. The most recent survey of the Better Outcomes through Research for Newborns network cites a refusal rate of 0.6%, or 638 newborns (out of 102,878) who are at risk for sequelae of vitamin K deficiency. This percentage may be rising at a rapid rate. Here in Illinois, there is no current surveillance system in place other than filing reports of medical neglect with the Department of Child and Family Services. These data cannot be relied upon, however, as there is no clear protocol for indicating or unfounding these reports, and unfounded reports are often purged.

Pediatricians play an integral role in preventing irreversible disease, and this rings especially true for vitamin K deficiency bleeding. We must continue to be leaders in implementing strong policies at individual hospitals, advocating for newborns on a political stage, and guiding child welfare systems to support our concerns. Per Dr. Glick (a child protective services physician and strong advocate for children):

I was one of the doctors who provided care to the child [mentioned in our article] who had late onset disease. This child suffered greatly...We must empower ourselves to be able to face a parent and know when to draw the line in the sand. There was no risk to the child receiving the intramuscular administration of vitamin K. What is needed is a conviction to a process and to share the end goal.

REFERENCES


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