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Doernbecher
Children's Hospital

School of Medicine
Division of General Pediatrics

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Chairwoman Monnes Anderson and members of the Senate Committee on Health Care,

For the record, my name is Benjamin Hoffman MD, FAAP. I am a Professor of Pediatrics at OHSU, and I have been a primary care pediatrician for over 22 years. I am also here representing the Oregon Pediatric Society.

I ask you to support HB 2644, which would help prevent potentially deadly bleeding in infants through administration of Vitamin K at birth via an injection, the only scientifically proven safe and effective way to ensure that babies do not suffer catastrophic hemorrhage. This bill has support from the Oregon Health Authority, Oregon Midwifery Council, the Oregon Chapter of the American College of Obstetricians and Gynecologists and the Oregon Academy of Family Physicians.

Presently, Oregon law states that “ A physician... or the midwife attending the mother at the birth of a child shall be responsible for ensuring that the newborn infant shall receive Vitamin K within 24 hours of birth by the most appropriate means, either by injection or orally.” As written, there is an implication that oral and injected Vitamin K are equivalent. However, they are not, and only the injection of Vitamin K will prevent the risk of severe bleeding for the infant. I want to be very clear here that the intent of this bill is not to undermine or diminish a caregiver’s right to make an informed decision for their infant, and specifically does not change a family’s right to decline Vitamin K, or to choose an oral dosing regimen.

It is crucial to note that in this effort to protect newborn infants in Oregon from catastrophic bleeding, I am equally passionate about families making informed choices through shared decision-making based on best available evidence. As a practicing pediatrician, I frequently work with families who have questions and doubts about things like Vitamin K. My experience is that through a thoughtful and respectful conversation with parents, many fears can be allayed, and we can reach a mutually acceptable approach to ensuring that the best interest of the baby be achieved.

Vitamin K is indeed a vitamin, a nutrient that is necessary for blood to be able to clot and stop bleeding. It is similar to Vitamin D, which is necessary for bone health, or Vitamin A, necessary for eye health. Without adequate levels of Vitamin K, any human, infant or adult, is at risk for life-threatening hemorrhage. Older children and adults get Vitamin K from their diet, especially leafy green vegetables, and through the bacteria that colonize our intestinal tract, that produce Vitamin K that we then absorb. All infants are born deficient in Vitamin K, for three reasons:

1. A mother’s Vitamin K is not shared with the developing baby, as it cannot cross the placenta.
2. Human breast milk contains only a small amount of Vitamin K, and it is not sufficient to protect babies.
3. All babies are born with sterile intestinal tracts, and do not have enough bacteria to produce the necessary amount of Vitamin K until around 4-6 months.

Studies have shown that approximately 1 in 100 of all newborns will suffer a significant bleeding event if they are not given extra Vitamin K within 24 hours of birth, and that this risk of serious, potentially deadly, bleeding can extend all the way through to six months of age. In Oregon, this translates to about 400 babies per year.

Every major scientific medical organization, including the American Academy of Pediatrics, the National Institutes of Health and the World Health Organization, recommend administration of 0.5-1mg of Vitamin K as an intramuscular injection at birth. Only dosing by injection has been show to prevent Vitamin K Deficiency Bleeding (VKDB). Use of oral dosing of Vitamin K may prevent some of the less serious bleeding events in newborns, but it does not prevent the catastrophic hemorrhage that can be so devastating. This later-onset



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VKDB involves severe hemorrhage in the abdomen, the lungs, and in about 60% of cases, into the brain. This can lead to lifelong disability, and to death approximately 25% of the time. Only the injection completely mitigates this risk.

I have cared for infants with Vitamin K deficiency bleeding, and it is not something that will ever leave me. Despite every effort, every medication, every attempt to help, I have watched an otherwise perfect infant bleed to death. I have cried with despondent parents, and I remember their tearful pleas, "if we only knew...". I am here because I want nothing more than to prevent any more needless suffering and pain.

The law, as currently written, implies a false equivalence between oral and injected vitamin K, and as I hope I have conveyed, this is just not the case. Oregon is unique among only 5 other states that permit administration of oral Vitamin K at birth; 44 others, the District of Columbia and Puerto Rico all require intra-muscular injection. Should a family choose to decline the evidence-based recommendations for preventing Vitamin K Deficiency Bleeding, and make an informed decision, then I fully support their right to do so. I also agree that administration of Vitamin K by mouth is better than no administration, and should a provider feel comfortable in that practice, I would not deny them that ability. However, there is no FDA approved oral form of Vitamin K that can be given to babies, and there is no accepted best-practice oral regimen that can be recommended.

What I am asking for is a common sense approach to aligning Oregon Law within what we know to be best-practice. What I am asking for is for you to put kids first, to protect babies from a completely preventable threat to their health using a proven, safe and effective dose of a vitamin. I would never recommend something to a family that I did not, or would not, do for my own 3 children. My only goal is to ensure that all children have the opportunity to thrive. I do want to reiterate that this bill will not interfere with a parent's right to make informed decisions for their baby, and in fact should help ensure that caregivers are making the best possible choice for their infants.

Support of HB 2644 will help do just that.

Respectfully Submitted,

A handwritten signature in black ink, appearing to be "Benjamin Hoffman".

Benjamin Hoffman MD FAAP

References

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