

Vitamin K for Newborns

Why are babies given a vitamin K injection?

Vitamin K Deficiency Bleeding (VKDB), a clotting disorder, causes spontaneous, uncontrolled bleeding which can cause death or permanent brain damage. Intramuscular injection of vitamin K prevents VKDB in almost all babies.

What are the chances of my baby getting VKDB?

Very slim. The majority of babies will do fine without it. However, it is impossible to predict which healthy baby will later be stricken with VKDB, and this is the basis for injecting all babies. Estimates vary of the risk of the healthy, breast fed infant developing VKDB ranging from one in 5,000 to one in 25,000. In babies that develop VKDB, the overall death rate in affected babies is 14-19%, and 21-40% of the survivors have long-term neurological handicaps. Intramuscular administration (injection) of vitamin K does not provide complete protection from VKDB. The incidence rate of VKDB among babies given vitamin K by injection after birth is approximately 1 in 400,000 infants.

What are the risks of the injection?

Potential risks of vitamin K injection are jaundice, flushing, rash, or a mild reaction at the injection site. Because the skin is broken when an injection is given, infection is possible, but exceedingly rare. Also, because a foreign substance is being injected, there is the risk of anaphylactic shock, a profound allergic reaction that can cause death. This is very rare. Other risks are hypothetical and require some background information:

The level of vitamin K in newborns is much lower than that of children and adults, and usually decreases further after birth. In fact, all mammals are born with lower levels than their mothers. In addition, breastmilk contains only a small amount of vitamin K. The healthy breastfed newborn who does not receive vitamin K supplementation has low vitamin K levels for the first few weeks to months of life. Despite the fact that this is characteristic of the normal newborn period, it is still referred to as a deficiency. Babies also have large heads relative to adult head size, but this is not considered bad. ***It is not known why babies are born with low vitamin K levels.*** This has led many researchers, midwives, and parents to believe that there is a good reason for lower vitamin K levels in newborns. Some researchers suggest it may be protective against tumor formation and cancer, but the evidence to date is inconclusive. It is unknown what risk, if any, there is in exposing the newborn to an unnaturally high concentration of vitamin K. ***Therefore, by administering vitamin K to normal infants we may be actually causing other problems we don't yet understand.***

Are there more natural ways to prevent VKDB?

Not that we know of. During pregnancy, very little vitamin K crosses the placenta. Even with huge quantities (5000 mcg) of a supplement or high vitamin K foods (670% of RDA), vitamin K will only be found in small quantities in breastmilk. Adults produce vitamin K in the large intestine, but the vitamin K produced in the newborn's intestine is not usable by the baby until he or she is 4-6 months old, and does not prevent VKDB.

What about oral vitamin K?

Studies have found that in order for oral vitamin K to be as effective as injectable vitamin K, babies must receive 2 mg orally at birth, and 1 mg orally each week for the first three months. A single dose of oral vitamin K at birth is not effective, and 3 separate oral doses of vitamin K is not effective. Some babies may not absorb oral vitamin K into their systems well. Many babies spit it up, which makes it impossible to properly dose the baby. It may be difficult to convince a pediatrician to prescribe it for you because it is not commonly used, and the pediatrician may not be familiar with the effectiveness or the dosage. For these reasons, we do not recommend oral vitamin K.

What are my options?

1. Give the baby an injection of vitamin K soon after birth.

The injection is given within 2-3 hours of birth. We use the preparation called Phytonadione because the incidence of jaundice is lower than with other kinds. The standard dosage is 0.5-1 mg.

2. Wait and see if a hemorrhage develops, and then treat it with administration of vitamin K.

Get care for your baby *immediately* if any symptoms develop. ***Remind your baby's healthcare provider that the baby was not given vitamin K. Because VKDB is so rare, many care providers may not have enough experience to recognize it.*** If a baby is treated with a vitamin K injection immediately, damage may be avoided. However, it may be too late to completely reverse the condition. In addition, some babies who develop VKDB will have no symptoms until brain damage has occurred. If you choose this option, be aware of the signs and symptoms of VKDB: 1. Bruises. *Normal newborns should not have unexplained bruises.* 2. Bleeding from the mouth, nose, ears, umbilicus, or other sites. *Normal newborns do not bleed easily.* 3. Blood in the vomit, urine, or stool (may appear as a faint red "halo" around wet parts of the diaper). 4. Poor appetite, difficulty breathing, unusual sleepiness, vomiting. 5. Prolonged bleeding from puncture sites (heel prick or injections) or circumcision. 6. Irritability, agitation, screaming, touch sensitivity, spasms. 7. Fontanel (soft spot) is bulging or tight. 8. Unusual posture.

Please indicate which option you choose for your baby and sign:

Vitamin K injection: I want my baby to have the vitamin K injection. I understand there are known and unknown risks with this choice, and I release and hold harmless my midwife from any complications that may occur.

Watch and wait: I do not want my baby to have vitamin K. I prefer the wait and see approach. I accept the risks and release and hold harmless my midwife from the consequences of this decision.

Signature _____ Date _____