

## **Your Baby and Vitamin K**

We recommend that all newborn babies should be given an injection of Vitamin K. We require your consent before doing so, and the following paragraphs give you further information to help you decide. It is your choice for your baby.

### ***WHY DO WE GIVE VITAMIN K?***

Vitamin K is given to prevent a very rare, but serious, disease called Vitamin K Deficiency Bleeding (VKDB) or Haemorrhagic Disease of the Newborn (HDN). VKDB causes internal bleeding, which can result in brain damage or even death. About 1 in every 10,000 babies born will suffer from VKDB. It is not known what causes VKDB.

An injection of Vitamin K will prevent your baby from getting VKDB, and has been used in Britain for over 30 years. If you have other children, it is very likely they have been given Vitamin K at birth.

### ***HOW IS THE VITAMIN K INJECTION GIVEN?***

An injection of 1mg Phytomenadione/Vitamin K1 (Konakion 1) is given into your baby's leg, soon after birth.

### ***ARE THERE ANY ALTERNATIVES TO VITAMIN K INJECTION?***

It is also possible to give your baby Vitamin K by mouth. However, this method may be less effective than the injection in preventing VKDB. If the baby vomits afterwards, the Vitamin K may not be absorbed. Three doses are required and some babies may miss the second or third dose.

### ***HOW IS VITAMIN K GIVEN BY MOUTH?***

If you prefer your baby to be given Vitamin K by mouth, two or three doses of 2mg Phytomenadione/Vitamin K1 (Konakion MM paediatric) are given;

- soon after birth
- at about 1 week old
- at about 6 weeks old (not required if bottlefeeding)

It is given in liquid form, and is squirted into your baby's mouth with a syringe.

The first two doses are given by the midwife, in hospital or at home. You should be given the second dose to take home with you when your baby leaves hospital. Your GP should give the third dose at your baby's six weeks' check if required.

### ***WHICH BABIES ARE MORE AT RISK OF HAVING VKDB?***

- premature and small babies
- babies of mothers taking anti-convulsant (epilepsy) drugs and anti-tuberculosis drugs
- babies who are not feeding well
- babies who have had a traumatic birth
- babies who are circumcised

If your baby falls into one of these groups, it is especially advisable to give Vitamin K injection.

Bottle fed babies have less risk of getting VKDB, as Vitamin K is added to formula milk. If your baby is bottlefeeding and you choose to give Vitamin K by mouth, s/he only needs the first two

doses; at birth, and at about 1 week old. However, we strongly recommend that you breastfeed your baby as breastfeeding has many benefits for babies' and mothers' health.

## **COULD VITAMIN K BE HARMFUL TO MY BABY?**

All drugs may have as yet unknown side effects. Giving Vitamin K results in much higher levels of Vitamin K in the baby than occur naturally, and at the current time we do not know everything there is to know about Vitamin K and its role in the human body.

There has been some research which suggests a possible link between Vitamin K injection at birth and childhood leukaemia. Some studies have suggested that children given Vitamin K injection were twice as likely to get leukaemia, compared to children who had Vitamin K by mouth, or no Vitamin K.

Leukaemia affects about one in every 25,000 children, so if the risk was doubled, this would mean that about one in every 12,500 children would get leukaemia. This should be compared to the risk that about one in every 10,000 babies will get VKDB if they do not have Vitamin K.

Several other studies have not shown any increased risk of childhood leukaemia from Vitamin K injections. The Chief Medical Officer has concluded that the available evidence does not clearly indicate an increased risk of leukaemia associated with Vitamin K injection, and recommends that all newborn babies be given Vitamin K to prevent VKDB.

## **IS VITAMIN K BY MOUTH SAFER THAN THE INJECTION?**

No studies have shown any association between Vitamin K given by mouth and childhood leukaemia. However, this is a new form of Vitamin K, so there has been less opportunity to study its safety and effectiveness, compared to the injection.

## **WHAT ARE THE SIGNS OF VKDB?**

If your baby has any of the following, s/he might be suffering from VKDB:

- bleeding which does not stop – e.g. from nose, cord, blood test site or circumcision
- unexplained bruising
- blood in stool or vomit

The following may be signs of liver disease which can cause VKDB:

- jaundice, even if mild, which continues after two weeks
- pale, whitish-grey stool
- very dark urine

Please inform your midwife, doctor or health visitor immediately if your baby has any of these signs, and tell them if your baby has not been given the Vitamin K injection. Many cases of VKDB can be treated if diagnosed quickly.

VKDB only affects babies up to 3 months' old.