Healthier Communities, Outstanding Care

Sherwood Forest Hospitals NHS Foundation Trust

INFORMATION FOR PATIENTS, PARENTS, GUARDIANS AND CARERS

Vitamin K for your newborn baby

What is Vitamin K?

Vitamin K is needed for our bodies to clot blood.

Babies are born with normal amounts of blood clotting factors at birth, but they are not activated fully due to low storage levels of Vitamin K.

Their levels are lowest at days two to three, and do not reach adult levels until about six months of age.

Why do babies need extra Vitamin K when they are born?

Babies clot blood with low levels of Vitamin K, but this changes once storage amounts are reduced after their first few days; this affects your baby's ability to clot blood, which causes spontaneous bleeding.

Vitamin K is offered to prevent bleeding after baby is born.

Babies who do not receive Vitamin K after birth are at risk of Vitamin K Deficiency Bleeding (VKDB), which is serious bleeding, including within the skull.

We do not know when babies clotting factors are adequate:

- Early VKDB - occurs on the first day of life.
- Classical VKDB occurs in the first week of life.

Late VKDB can occur from the first week to up to six months, usually between three and eight weeks.

What else do I need to know before making a decision about Vitamin K prophylaxis (prevention)?

Vitamin K is also found in breast milk in low levels; breast milk also contains antibodies and provides pain relief and comfort for your baby, plus there are many short and long-term benefits of breast/chestfeeding, for both you and your baby.

Vitamin K is added into artificial formula milk. If you plan to breast/chestfeed we would suggest avoiding artificial formula if it is not clinically required; this is due to possible allergic sensitisation, or a negative effect on your milk production.

Which ever way you feed your baby, Vitamin K will always be recommended by paediatricians and other healthcare professionals, including the UK Government's Chief Medical Officer and Chief Nursing Officer, to reduce the chance of VKDB.

What do I need to decide before baby is born?

Vitamin K prophylaxis is generally very well tolerated by babies. Evidence shows that both routes of administration of Vitamin K – intramuscular (an injection into a specific muscle) and oral (by mouth) are effective in prevention of VKDB.

At Sherwood Forest Hospitals we respect your parental right to make an individualised choice - your midwife will offer three choices for Vitamin K for your baby both during pregnancy and after birth which are:

1. **Injection - one dose (1mg) after birth.**
2. **Oral - three doses (2mg each) administered by your midwife at birth, and then on day five and day 28.**
3. **None – if parents decline prophylactic (preventative) Vitamin K after birth completely.**

Side effects can include:

- Local irritation and inflammation after IM (intramuscular) use - thought to be less likely in smaller volumes.
- A few unconfirmed cases of anaphylaxis (a severe life threatening reaction) after IV (intravenous – meaning into a vein) administration.

How common is late Vitamin K deficiency bleeding (late VKDB)?

VKDB is a rare bleeding disorder (one to two babies per year in Nottingham), which can lead to death or long-term disability.

There is a higher chance of VKDB for babies who are:

- Born prematurely.
- Are exclusively breast/chest feeding (however the benefits of breast/chestfeeding outweigh this small increased risk).
- Not feeding effectively.
- Born via forceps or ventouse.
- Are circumcised.
- Had breathing difficulties at birth.
- Exposed to medications taken by their mum/birthing parent which have associated risks of bleeding in the newborn, e.g., anticonvulsants.
- Have an infection or need surgery.
- Have an underlying liver disease (this can be diagnosed via prolonged jaundice).

Chances of babies developing late VKDB according to the method of administration, or no Vitamin K, are:

1) Injection - 0 to 0.4 infants per 100,000
2) Oral (one dose) - 1.4 to 6.4 infants out of 100,000. Three doses of oral Vitamin K reduces this incidence to 0.9 per 100,000 cases.
3) No Vitamin K - 4.4 to 7.2 infants out of 100,000.

What happens if I choose to decline Vitamin K prophylaxis for my baby?

Babies who did not receive Vitamin K at birth are at a slightly higher risk for VKDB – the estimated risk of having a significant bleed is in the region of **one out of 2000** for exclusively breast/chestfed babies.

The chance of a baby having a bleed is low, but the consequences can be very serious. There may be things which increase the chance of an issue (e.g., antibiotics and feeding issues, including if baby is not receiving adequate milk of any kind) as Vitamin K levels may not be ideal.

Contact details

Speak to your community midwife for more information.

Further sources of information

NHS Choices: www.nhs.uk/conditions
Our website: www.sfh-tr.nhs.uk

Patient Experience Team (PET)
PET is available to help with any of your compliments, concerns, or complaints, and will ensure a prompt and efficient service.

King's Mill Hospital: 01623 672222
Newark Hospital: 01636 685692
Email: sfh-tr.PET@nhs.net

If you would like this information in an alternative format, for example large print or easy read, or if you need help with communicating with us, for example because you use British Sign Language, please let us know. You can call the Patient Experience Team on 01623 672222 or email sfh-tr.PET@nhs.net.

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