

Vitamin K

Information for parents-to-be



This leaflet has been designed to help you decide whether your baby should receive a vitamin K supplement at birth.

What is vitamin K?

Vitamin K is needed for the normal clotting of blood and is naturally made in the bowel.

Why is a vitamin K given to newborn babies?

All babies are born with low levels of vitamin K. Several days after birth, a baby will normally produce their own supply of vitamin K from natural bacteria found in their gut. They can get a small amount of vitamin K from their mother's breast milk and it is added to formula milk. This can help the natural bacteria in the baby's gut to develop, which in turn improves their levels of vitamin K. However, babies are more at risk of developing vitamin K deficiency until feeding has been established.

A deficiency in vitamin K is the main cause of vitamin K Deficiency Bleeding (VKDB). The risk of this happening is approximately 1 in 100,000 for full term babies. This is a serious disorder which may lead to internal bleeding. Signs of internal bleeding are:

- blood in the nappy,
- oozing (bleeding) from the cord
- nose bleeds
- bleeding from scratches that doesn't stop on its own
- bruising
- prolonged jaundice (yellowing of the skin), at three weeks if breast feeding and two weeks if formula feeding.

VKDB can lead to bleeding on the brain which can cause brain damage and/or death.

There are three types of VKDB:

Early VKDB – symptoms develop within 24 hours of birth.

Classical VKDB – symptoms develop between 24 hours and 7 days after birth.

Late VKDB – symptoms develop after 7 days and for up to 12 weeks after birth.

By giving newborn babies a vitamin K supplement at birth the risk of developing VKDB can be almost completely prevented.

Are some babies at a higher risk of VKDB than others?

Babies who are thought to be at a higher risk includes those who:

- are premature
- had a complicated birth requiring the use of forceps or ventouse, or where bruising has taken place
- have liver disease
- cannot absorb fat-soluble vitamins due to diarrhoea, coeliac disease or cystic fibrosis
- are babies of mothers taking anti-convulsant medications
- are babies of mothers with significant liver disease.

It is impossible, though, to identify with absolute certainty babies who are high risk. 1 in every 4 babies who develop VKDB cases have none of the problems above.

Whilst the Oxford University Hospital Trust and the Department of Health recommend that all newborn babies are given vitamin K, the decision to give it to your baby is entirely yours.

Is vitamin K harmful?

A concern was expressed in the early 1990s that there was a link between vitamin K supplements and leukaemia or other cancers. A careful review of data from the UK Children's Cancer Study Group in 2003 found no evidence to support this.

Are there any alternatives?

Vitamin K supplements are the only way to give enough of the vitamin to prevent VKDB in newborn babies.

How is vitamin K given?

Vitamin K is given either by mouth through a syringe or by injection into the muscle in the leg.

Vitamin K is usually given by injection to babies born in the Oxford area. One dose is given at birth and this does not need to be repeated.

If you choose to give your baby vitamin K by mouth, your baby will need up to three doses to achieve the same effectiveness as the injection. The first dose is given at birth, the second at four to seven days of age by your community midwife and the third dose (given to babies who are having breast milk for more than half of their feeds) at one month old by your health visitor.

Vitamin K is added to formula milk, therefore a third dose is not required for babies who have half or all of their feeds from formula milk.

If your baby is premature or poorly when they are born, they will be admitted to the Neonatal Unit and will be given vitamin K by injection as part of their hospital treatment/care.

Further information

If you need further information, please contact your community midwife or GP. The following websites and information may also be helpful:

'Your baby after birth' – NHS Choices:

www.nhs.uk/conditions/pregnancy-and-baby/pages/your-baby-after-birth.aspx

"Care of women and their babies in the first six weeks after birth" – Produced by NICE:

<http://guidance.nice.org.uk/CG37/NICEGuidance/pdf/English>

Useful telephone numbers

Community Midwives Office John Radcliffe Hospital
Tel: 01865 221 696

Community Midwives Office Horton Maternity Hospital
Tel: 01295 229 190

References

Riordan. J and Wambach. K (2010) Breastfeeding and Human Lactation. 4th edition. Jones and Bartlett

Busfield A, et al, Archive of Diseases of Childhood, 2013, Reference Vitamin K deficiency bleeding after NICE guidance and withdrawal of Konkion neonatal: British Paediatric Surveillance Unit Study, 2006-2008 Volume 98 page 41-47

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Authors: Liz Knight, Practice Development Midwife
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Oxford University Hospitals NHS Trust
Oxford OX3 9DU
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