Vitamin K prophylaxis in the newborn

Why is Vitamin K given?

Vitamin K is necessary for the blood clotting process and deficiency can increase the risk of haemorrhagic disease of the newborn (HDN). Early disease is most likely to occur within 7 days of life. Some babies can develop a late and more severe form of this disease after the first week and up to 26 weeks (about 6 months) of life (1.2). Intracranial bleeding may result and of those affected, 30-50% will die or suffer severe brain damage (2).

At The Simpson it is recommended that newborn babies routinely received INTRAMUSCULAR Vitamin K to prevent the development of HDN.

Babies born to the following women are at higher risk of developing HDN:-

- those receiving anticonvulsant therapy or antituberculous agents
- those who have poor absorption due to hepatic disease or biliary obstruction (2)
- women who have undergone surgical procedures during delivery, have experience prolonged labour or are suffering from albuminuria
- babies who are birth asphyxiated (3).

These parents should be informed that we strongly advise the administration of IM vitamin K to their baby.

Vitamin K can be administered orally to babies. To those parents who request more information on the oral route, it is essential to discuss the advantages and disadvantages of oral versus IM vitamin K. This will enable these parents to make an informed decision.

The use of vitamin K must be discussed with the prospective parents in the antenatal period

Concerns about Vitamin K

Use of intramuscular Vitamin K in neonates was previously associated with an increased risk of certain childhood cancers (6). It was unclear whether this supposed causal link was due to the total dose given, route, use of a bolus dose or certain components of the parenteral formulations. As a result, an oral form of Vitamin K is now licensed for use in term babies > 36 weeks (4). The association of Vitamin K with childhood cancers has now been strongly refuted (7,8). There are now concerns that sub-optimal doses of oral Vitamin K may increase the incidence of late onset HDN (9). It is therefore essential to stress to parents who have requested oral Vitamin K that they must ensure that babies receive all the recommended doses (1,2,3).

References

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