

Frenotomy

(division of a restrictive lingual frenulum or “tongue tie”) when vitamin K has been declined by parent/s.

What is the risk?

There is a rare condition affecting infants called Vitamin K Deficiency bleeding (VKDB). It can cause significant bleeding and, in rare cases, death due to intraventricular haemorrhage (bleeding in the brain). It is preventable by giving a vitamin K injection at birth or else by a few oral doses of vitamin K in the first month.

VKDB usually occurs in the first few months of life and has a peak incidence between 3 and 8 weeks after birth. Essentially there is no real risk of VKDB occurring after the age of 6 months.

What is the risk of vitamin K deficiency bleeding?

The risk of VKDB in the period between birth and age 6 months is highest for babies who are exclusively breastfed. Breast milk has low content of vitamin K, in contrast to formula milk which contains added vitamin K.

The risk of VKDB is estimated to be in the region of 1 in 2,500 for babies who don't get vitamin K at birth and who are exclusively breastfed.

If a baby is on part breastmilk and part formula milk, then unless they were jaundiced or had delayed or poor feeding, they would probably be getting sufficient ongoing dietary vitamin K intake to avoid VKDB, even if they had not received vitamin K at birth.

Can a baby still be offered a vitamin K injection (Intramuscular) or oral vitamin K?

Yes, a baby can still receive vitamin K if the parent/s are happy. Indeed, we would still recommend this. Oral or injected vitamin K is a dietary supplement- it is derived from plants and is naturally occurring and has no known toxic effects in humans. Vitamin K is essential for proper functioning of the blood clotting system in the body.

If so, how many doses and after how many days, can a frenotomy be performed (in the absence of other familial inherited clotting disorders)?

For babies whose parent/s don't want vitamin K parenterally at birth, they should routinely be offered three oral doses instead: one at birth, the second after a week, and the third after 4 weeks from birth.

In respect of doing the frenotomy, just a single oral dose of vitamin K should be sufficient – given at least 1 day before (or first thing in the morning if it is an afternoon procedure). Provided that the baby did not bring back the oral dose, there is no need to do any routine blood test to check clotting (coagulation screen) before the frenotomy.

Why has the advice changed recently about a clotting screen not being necessary now?

That is because coagulation (clotting) screen is not a sensitive marker for vitamin K deficiency. By the time the coagulation screen becomes deranged (abnormal), a baby would be in advanced deficiency and on the verge of bleeding.

What if a baby bleeds more than expected when the procedure is done?

If there is anything more than the usual, small amount of bleeding after frenotomy - such as prolonged oozing, that does not settle within the expected timeframe, e.g., not showing haemostasis (stopping bleeding) within 5-10 minutes, then a baby could well be showing minor VKDB and should then always be investigated. The baby would not have any life-threatening bleed from the frenotomy site, only prolonged oozing. The life-threatening bleed would come later if a case of VKDB was missed (an intraventricular haemorrhage) if baby had not had vitamin K.

Further resources to help aid decision making.

Vitamin K and the newborn Dr Sara Wickham sarawickham.com
Vitamin K and your newborn Aims.org.uk

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