

VITAMIN K

INDICATIONS

Prophylaxis

- Neonates are relatively deficient in Vitamin K (phytomenadione) and those who do not receive supplements are at risk of bleeding (Vitamin K deficient bleeding, formerly known as haemorrhagic disease of the newborn)

All babies should be offered Vitamin K prophylaxis

Therapy

- Vitamin K can also be used to treat any baby with active bleeding that might be due to Vitamin K deficiency after blood has been taken for clotting studies
- a prolonged prothrombin time (INR ≥ 3.5) that falls within 1 hr of treatment, with a normal platelet count and fibrinogen levels, confirms diagnosis

ADMINISTRATION

Prophylaxis

- A single dose of Vitamin K (Konakion MM Paediatric) 1 mg IM is the most clinically and cost-effective mode of administration
- If parents decline IM route, offer oral Vitamin K as second line option (safety fears of parenteral Vitamin K appear to be unfounded)
- Give in accordance with manufacturer's instructions in order to ensure clinical efficacy
- Babies who are exclusively breast fed will require additional doses after discharge from hospital

IM use

- Do not dilute or mix with other parenteral injections

Oral use

- Break open ampoule and withdraw 0.2 mL (2 mg) into oral dispenser provided. Drop contents directly into infant's mouth by pressing plunger

Although the product is licensed for IV use, this route does not provide the prolonged protection afforded by IM doses, and subsequent doses are often unintentionally omitted

Prophylaxis dosage

| | Konakion MM Paediatric |
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| Healthy neonates of ≥ 36 weeks | First line <ul style="list-style-type: none"> • 1 mg IM at birth or soon after Second line <ul style="list-style-type: none"> • 2 mg orally at birth • Plus 2 mg orally at 4-7 days • Plus 2 mg orally at 1 month if exclusively breast fed |
| Term neonates at special risk <ul style="list-style-type: none"> • Instrumental delivery, caesarean section • maternal treatment with enzyme-inducing anticonvulsants (carbamazepine, phenobarbital, phenytoin), rifampicin or warfarin • requiring admission to NICU | 1 mg IM at birth or soon after Do not offer oral Vitamin K |
| Preterm infants < 36 weeks but ≥ 2500 g | 1 mg IM at birth or soon after |
| Preterm infants of < 36 weeks and < 2500 g | 0.4 mg/kg (equals 0.04 mL/kg) IM |

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| | shortly after birth Do not exceed this parenteral dose The frequency of further doses should depend on coagulation status |
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Therapy dosage

- 1 mg/kg IV initially
- Further doses as required depending on clinical picture and coagulation status
- may need to be accompanied by a more immediately effective treatment such as transfusion of fresh frozen plasma

IV use

- Do not dilute or mix with other parenteral injections but may be injected directly into the lower part of an infusion set